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PROHIBIT VIVISECTION IN THE DISTRICT OF COLUMBIA

HEARINGS

BEFORE THE

COMMITTEE ON THE DISTRICT OF COLUMBIA HOUSE OF REPRESENTATIVES

SEVENTY-NINTH CONGRESS

SECOND SESSION

ON

H. R. 5572.

A BILL TO PROHIBIT EXPERIMENTS ON LIVING DOGS
IN THE DISTRICT OF COLUMBIA

FEBRUARY 28 AND MARCH 1, 1946

Printed for the use of the Committee on the District of Columbia



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PROHIBIT VIVISECTION IN THE DISTRICT OF COLUMBIA

THURSDAY, FEBRUARY 28, 1946

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE OF THE COMMITTEE
ON THE DISTRICT OF COLUMBIA,
Washington, D. C.

Mr. McGEHEE. The committee will come to order.

The Judiciary Subcommittee of the District Committee will open hearings this morning on H. R. 491, known as the vivisection bill.

H. R. 491 is as follows:

[H. R. 491, 79th Cong., 1st sess.]

A BILL To prohibit experiments upon living dogs in the District of Columbia and providing a penalty for violation thereof

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this Act it shall be a misdemeanor for any person to experiment or operate in any manner whatsoever upon any living dog, for any purpose other than the healing or curing of said dog, in the District of Columbia.

SEC. 2. That any person convicted of a violation of this Act shall be sentenced to pay a fine of not less than \$100 nor more than \$500, or to undergo imprisonment for a term of not less than three months nor more than one year, or both such fine and imprisonment.

SEC. 3. That all Acts or parts of Acts inconsistent herewith are hereby repealed.

Mr. McGEHEE. Mr. Lemke, you are one of the proponents of this bill and I am going to let you outline your witnesses as you want them to come on, because I have promised you the first day's time in the hearings.

Now, who do you want to appear first?

Mr. LEMKE. I will appear first.

Mr. McGEHEE. All right.

STATEMENT OF WILLIAM LEMKE, REPRESENTATIVE FROM THE STATE OF NORTH DAKOTA

Mr. LEMKE. Mr. Chairman, I wish to thank you for the opportunity to present the side of the proponents of this bill, and at the very opening I will ask you to substitute H. R. 5572 for H. R. 491; there is a slight amendment that I have made in the bill but it does not affect the substance of the bill in any way.

Mr. McGEHEE. Without objection it is so ordered.

(H. R. 5572 is as follows:)

[H. R. 5572, 79th Cong., 2d sess.]

A BILL To prohibit experiments upon living dogs in the District of Columbia and providing a penalty for violation thereof

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this Act

it shall be a misdemeanor for any person to experiment or operate in any manner whatsoever upon any living dog, for any purpose, except operations normally performed for the convenience of the owner and the welfare or curing of said dog, in the District of Columbia.

SEC. 2. That any person convicted of a violation of this Act shall be sentenced to pay a fine of not less than \$100 nor more than \$500, or to undergo imprisonment for a term of not less than three months nor more than one year, or both such fine and imprisonment.

SEC. 3. That all Acts or parts of Acts inconsistent herewith are hereby repealed.

Mr. LEMKE. Mr. Chairman and members of the committee, I hope this committee will report this bill favorably. If we have confidence in the people who elect us, if we still believe in government of, by, and for the people, then I feel this bill should be reported out favorably. It should be disposed of on the floor of the House on its merits after all the pros and cons have been heard. The interest manifested in this bill throughout the Nation, I believe warrants this committee in taking that action.

I am opposed to the vivisection of dogs because throughout the ages, the dog has been man's best friend and close companion. On many occasions he has saved the lives of human beings. For generations he has been the watchdog—the protector—of man and his property. But for the alertness of the dog, there would be many more robberies, kidnappings, and other crimes.

History is replete with examples of the St. Bernard dog saving people from freezing to death in the Alps. It is replete with almost daily occurrences where a dog saves a child, woman, or man's life. We have had some very recent examples within a stone's throw from the Capitol. These cases are so numerous and are not only known to all Members of Congress, but are universally known throughout the world.

In World War I the dog took his place with the armed forces on the battlefields. He guarded the wounded, and carried messages from general to general. But in World War II he occupied the foxholes with the GI's. He gave them comfort and courage. He watched and protected millions of dollars of supplies. He was wounded and died with the fighting men of this Nation. No one dare deny but what he played a large part in the war.

That is why so many GI's are interested and have written Members of Congress to pass this bill. They tell us that the dog was not only a companion but a protector. They tell us that the dog stood by them in the silence of the night when no human being was within sight or reach. They tell us that the dog is not only man's protector but his most loyal companion—that he will give his life in defense of his owner. This even though his owner on occasions is cruel. He will forgive and protect him just the same.

Here are a few letters of hundreds that I have received that I wish to read and have inserted in the record:

The first one is from the American Legion, Department of New York, Veterans K-9 Corps, dated February 25, 1946. [Reading:]

We veterans, who trained, handled, and fought with our dogs, in this war just won, ask you to read carefully and act on the following:

The American Legion passed unanimously a resolution to support the passage, in New York State, of the DiConstanzo-Crews bill to forbid experimentation on living dogs. Guinea pigs, rabbits, foxes, coyotes, and other animals answer the purpose as well or better.

Dogs are members of many millions of families. They are loved and revered by many millions of children. The mental anguish suffered by a large majority

of our people, because dogs are used for experiments, is a terrible type of suffering in itself. Why should our children be brought up to suffer this anguish when it is not necessary to use dogs?

Dogs fought and bled and lived and died with our boys in the war just won. They saved the lives of many thousands of fathers, sons, husbands, brothers, and loved one. One dog alone, in the Battle of Luzon, Philippines, saved a whole regiment from being wiped out by Japs. These dogs' war record is unsurpassed. No other animal is near enough to man, and loves him enough or is human enough to accomplish such deeds. Dogs deserve and have won this right to be protected from suffering. Families composed of over 80,000,000 people in America own dogs and deserve their peace of mind from such mental suffering—when other undomesticated animals are as good or better for experimentation.

Do not be confused: We are fighting only for dogs. Because of dogs' outstanding war record and because millions of veterans' families own and love them, the American Legion asks that living dogs be excluded from experiments. It is not necessary to use dogs—other undomesticated animals are as good or better. Doctors have told us that foxes and coyotes are just as good as dogs.

As a member of the United States Legislature, we strongly urge your favorable support of the Lemke bill, to stop experimentation on living dogs.

That is signed by quite a few colonels, corporals, sergeants, and so on of the American Legion of New York.

The next letter I wish to read is from the American Legion, on its stationery, K-9 Corps.

DEAR SIR: Dr. George Goodwin of the American Museum of Natural History, has informed the American Legion that coyotes are of the canine family, and are easy to procure and to breed in captivity. The physical construction of the coyote is the same as the dog, and answers the purpose for research experimentation, as well as the dog.

There is a bounty placed on coyotes in California, Colorado, Idaho, Utah, Texas, and other States because they "overrun" these States.

The American Legion feels confident that the above information will convince you that it is not necessary to use dogs and, that you will now use your best efforts to see that the DiConstanzo-Crews bill is reported out of the assembly judiciary committee—

And so forth.

That is signed by James M. Austin.

Then here is another letter and also a short article by one scientist on Institute Uses Few Dogs.

This is from Dr. Stuart Crawford of Garden City, Long Island, N. Y., one of the outstanding veterinarian surgeons, a graduate of Cornell University Veterinary College, says that—

at Cornell they do not ever vivisect or experiment on living dogs. The college holds a clinic for all sick animals. The doctor professors diagnose the sick dogs and animals that are brought in by the public and prescribe the treatment or operations needed, before the students, and then proceed with the treatment of the dog or animal for the good of the animal.

The executive committee, American Legion, Department of New York, unanimously passed a resolution to support the passage of the DiConstanzo-Crews bill to prohibit experimentation on living dogs. This makes it mandatory that the Legion throw its full support to have the Legislature pass this bill.

Then next there is a letter which comes from a veteran and I wish to read some excerpts from it:

During my time in the Army I was connected with the K-9 Corps for 2½ years. During that time I trained and handled a number of guard and patrol dogs. I would like to help you in every way possible but I am quite sure that all of the numerous achievements of the K-9 Corps in this war are a matter of record.

As to my personal point of view regarding the worth of dogs in war, I have only the best to say for them. Due to the fact that we were using efficiently trained and intelligent dogs on guard, eight men were able to maintain the security measures of a depot containing over 5,000,000 gallons of gasoline and oil. This is by no means the largest job done by these dogs. On several occa-

sions the dogs were entrusted with the protection of many million dollars worth of equipment and strategic areas. Once our activities brought us into a field of combat and the dogs were invaluable in saving lives and conserving manpower. I know of numerous occasions where, if it had not been for the presence of the dog, the loss of life would have been many times higher than it was.

That is signed by Martin L. Levie.

Here is another letter dated February 20, 1946, from a veteran, which I shall not read in its entirety but I will have it inserted in the record. It is along the same line, and strongly shows that his dog brought comfort and good cheer to nurses at different times.

(The letter ordered inserted in the record is as follows:)

LETTER FROM CORPORAL WYNNE

CLEVELAND 11, OHIO, February 20, 1946.

NATIONAL HUMANE LEAGUE, INC.,

Forest Hills, N. Y.

GENTLEMEN: In answer to your letter of January 20, 1946, I feel very honored to give my opinion of the worth of dogs in this war. In my opinion they are priceless in saving life on the battlefield. I have seen them work, and to say they did excellently is putting it mildly.

I would like to tell you what my own dog, Smoky, did in the war. My little pal went everywhere with me, ate the same food, went through a couple hundred air raids, 2 invasions and 13 combat missions. She was my playfellow on the desolate isles of the Pacific and she meant more to me than my personal belongings when I had the choice of saving either in a typhoon and flood.

Without hesitation it was Smoky that I saved.

We had a companion whose presence cheered the crew. Smoky broke the monotony for the whole crew—gunners, radio man, engineer. It got so that Smoky and I were requested to fly with several different crews.

The main place Smoky helped was in hospitals, in our spare time. The fellows wouldn't get hysterical with laughter but there were short thoughtful laughs at the end of every trick. When I was sick with dengue fever the Army let Smoky stay right with me and the Red Cross girls would take her from ward to ward and she would sing her song of cheer.

She would make us laugh just by the way she chased butterflies in Guinea, or the birds on Black or monkeys four times her size in the Philippines.

She helped the Army engineers by pulling a wire through a 70-foot pipe under a runway of an airfield.

Whenever I think that perhaps she hasn't done so much. I always remember the enclosed letter from a Red Cross worker in a Navy Hospital which pays tribute to her work.

It does my heart good to know that for many thousands she means so much. I only regret that there are so many who don't see that "Man's best friend is his dog".

Sincerely,

WILLIAM A. WYNNE.

Mr. LEMKE. Then I have here a recent statement from the New York Journal-American of February 15, 1946. This incidentally appeared at Kane, Pa., February 15, AP:

Battling to the death against a savage mountain lion, a mongrel dog gave up his life today to save his 4-year-old master.

Later the 150-pound puma was slain by a State policeman who was forced to use a service pistol after his rifle jammed.

The puma, which escaped from a nearby private zoo entered the yard of Claude Mollander, Sr., where his son, Claude, Jr., was playing with his dog.

Members of the family heard Claude screaming at the door, let him in, and witnessed the end of the fight between the lion and the dog.

Then another letter which is short. The statement has been frequently made that only sentimentalists are back of this bill. I wish to God there were more of them in the world who were back of this bill. But among some 10,000 to 20,000 letters I have received, many of them

are from Waves, GI's, and Wacs, and many from men in business and professional life, many of them from doctors who tell me not to make them public as a rule because they do not wish to get in trouble with their own profession, and they state that the vivisection of dogs is no longer essential or necessary and that all results can be accomplished by the vivisection of other animals.

I shall just read this short letter here, which comes from the Mayflower Hotel:

The writer, as well as scores of friends and associates, begs to assure yourself and colleagues of our whole-hearted support in your efforts to abolish the cruel, barbarous, and dog-torturing practice of vivisection.

In my daily work as information clerk for one of the city's leading hotels, I am in contact with a very great number of cultured people, who, like myself, are most vehement at such an ungodly practice.

If there is any honorable way that I can be of any assistance in furthering your efforts, I shall be at your service.

That is signed by Martha B. Thompson.

Then just one more letter from a colonel in the United States Army, which is dated February 25:

This is to advise you that we are heartily in favor of and strongly supporting the bill which you are sponsoring, opposing vivisection of dogs and other forms of cruelty practiced on them by the medical and allied professions.

We wish to commend you on the stand you have taken and hope for the successful passage of this bill. We also wish to volunteer our services in any way you can suggest. If there is any way in which we can be of help please let us know.

That is signed by Lt. Col. K. Norman Heyne and Judith L. Heyne.

I shall now proceed with my own statement.

I am opposed to vivisection of dogs because little, if any, useful purpose can be accomplished. It has become largely a medical fad. I know that some eminent physicians will disagree. But I also realize that physicians are not infallible. That what they do not know would write more books than what they do know. They are just as fallible as my own profession—the legal profession. The medical profession has rendered great service to mankind. But they have also made many mistakes the same as other professions and scientists.

We all know that every profession gets into ruts and blindly follows beaten paths. It was not so very long ago that eminent physicians bled people. If anyone had opposed bleeding he too would have been accused of being a sentimentalist. It was not so very long ago that when you were ailing doctors filled up with all kinds of drugs. This in the hope of hitting upon a cure—a discovery. In many cases the end was the cemetery.

This is not a criticism of the medical profession. That profession, like all professions, is made up of human beings. On an average they know neither more nor less than the members of other professions. Just because some doctors say that vivisection of dogs is essential, or because it is written in some medical book that it is necessary, does not make it so. Neither does it follow that because there is precedent of dog vivisection it must continue. I have always taken the position that we should follow "has been"—precedent—only so far as it throws light on what ought to be.

I am sure that we all agree that dogs ought not to be vivisected unless there is good reason and logic for it. I do not know whether any good has, or ever will come from the vivisection of dogs. I am,

however, satisfied that it is no longer necessary. I feel that the vivisection of dogs, because of his fidelity to man, is not conducive to the best interests of our Nation. Frankly, I do not believe that all the statements made in medical books of the good that has been derived from the vivisection of dogs is true. I challenge the accuracy of some. I demand proof.

I say unhesitatingly that many of the benefits claimed to be derived from vivisection could have been, and would have been discovered without it. Penicillin was discovered by a British physician—a country in which vivisection is very much restricted. A country where the vivisector has to get a permit before he can experiment on live animals. He must make an application for the permit and show good cause why he should be permitted to practice that cruelty. I quote here from the British law:

The experiment must be performed with a view to the advancement by new discovery of physiological knowledge or of knowledge which will be useful for saving or prolonging life or alleviating suffering, and by a person holding a license from the Secretary of State; and where the license is a conditional one, or where the experiment is for the purpose of instruction, it must be performed in a registered place.

During the whole of the experiment the animal must be under an anaesthetic (other than urari or curare) of sufficient power to prevent its feeling pain. If pain is likely to continue after the effect of the anaesthetic has ceased, or if any serious injury has been inflicted, the animal must be killed before it recovers from the influence of the anaesthetic.

* * * Dogs, cats, horses, asses, and mules are further specially protected. No experiment may be performed upon a dog, or cat without anaesthetics, except on a certificate being given stating, in addition to the statements already mentioned, that the object of the experiment will be necessarily frustrated unless it is performed on an animal similar in constitution and habits to a cat or dog, and that no other animal is available.

* * * The power to grant licenses is vested in the Secretary of State (i. e. The Home Secretary), who may insert a provision in any license granted that the place where any experiment is to be performed by the license must be registered as directed by order and approved by him. (No general or special orders have yet been issued under this section.)

The Secretary of State may also license any person whom he may think qualified, and for so long as he thinks fit, and may revoke the license if satisfied that it ought to be revoked. He may annex to the license any conditions which he thinks expedient, and which are not inconsistent with the provisions of the Act.

That is the end of the British law I have quoted.

Now I shall go on with my own statement.

We have all heard over the radio that the cure of diabetes was discovered by injecting insulin into a dog. The truth is that there is no cure, that all that insulin does is to control diabetes. But why was it necessary to first give the dog diabetes and then inject insulin?

The truth is that the discovery of the control of diabetes was delayed a year by practicing with dogs, when it could have been used on a patient. Any chemist knows that insulin is not poisonous and could have been injected into the patient direct. It was not necessary to experiment on a dog, but if it had been necessary to practice on animals, then why not a guinea pig, or a coyote, or a wolf. There are plenty of these to be had in this country. Let us save the dogs.

Finally I am opposed to the vivisection of dogs because of the brutality. Being so closely associated with man and civilization, it cannot help but have a bad effect upon the person who performs the

experiment. Science in the long run will not gain by cruelty. It is only one step from the dog to the human being. The step that Hitler's scientists took in Germany. Germany and the world would have been better off if she had had more sentimentalists. If there is anything the world needs today, it is a higher standard of humanity—more sentimentalists.

We in America must become more humane to the dog—man's best friend. We must stop vivisection as far as the dog is concerned. The dog affects the life of an overwhelming majority of children. These children place their confidence in its loyalty and fidelity and so do men and women everywhere.

In conclusion permit me to ask this subcommittee to report this bill favorably so that all the pros and cons can be considered, discussed, and weighed on the floor of the House. This is a public issue. The Nation as a whole is concerned. You may call it a sentimental issue. That does not answer it. Sentiment has governed the human race and guided it to higher paths of morals and decency. Sentiment is the highest attribute that the human race possesses. Let us have more of it, not less.

Mr. Chairman, I will now call Dr. Joseph Strickland as witness.

Mr. HARRIS. Just one moment. May I ask Mr. Lemke two or three questions about his bill.

In the first place I observe that the bill applies only to the District of Columbia, is that right?

Mr. LEMKE. That is right; that is the only place that the Congress has jurisdiction.

Mr. HARRIS. How many other States have these restrictions?

Mr. LEMKE. All of the States in the Union have restrictions on cruelty to animals, but in most of them vivisection has been made the basis for experimentation among the medical profession, with some restrictions. Some of the States have quite strong laws.

Mr. HARRIS. Are there any States at the present time that have laws that prohibit vivisection altogether?

Mr. LEMKE. There are not, but there are bills pending in New York and many States, and I feel that the District of Columbia which is under the control and the jurisdiction of Congress ought to set the example of stopping this brutality to dogs. This bill of mine has nothing to do with and we are not interested in anything but dogs; and may I state that I introduced the bill largely from my talks with veterans and others, and it is not necessary to arrive at these results that we be concerned with the States here, but rather set an example.

Mr. HARRIS. I believe you read a number of communications, and I assume from what you said most of those were from other sections of the country, other than the District of Columbia.

Mr. LEMKE. As I indicated.

Mr. HARRIS. Why read those into the record if we should not be concerned with other than the District of Columbia?

Mr. LEMKE. We are concerned with other people generally but not for the legislation because we do not write the State laws.

Mr. HARRIS. Is this a veterans' measure?

Mr. LEMKE. The veterans of New York have endorsed it.

Mr. HARRIS. Yes, sir; I know.

Mr. LEMKE. But generally I have no information on the subject. I will say this, that you can get GI's anywhere who will come forward for the bill.

Mr. HARRIS. Have you read from some other than those who were in the Army?

Mr. LEMKE. I have some of them; yes.

Mr. HARRIS. I am just wondering if we are not getting into the habit in this Congress of clothing so-called purported alleged legislation of veterans.

Mr. LEMKE. The veterans are most vitally concerned in this, more so than those who did not serve, because they know the dogs.

I do not want it understood that this bill is sponsored by any national veterans' organization. I have no such information. I can find out for you if you wish me.

Mr. HARRIS. I have had a great many communications, as I know every member of this committee has. I am not sure I have had one communication from a man who said he was a veteran and asked on that ground that this legislation be favorably considered.

Mr. LEMKE. I have read several veterans' communications in here. I will say I have some 20,000 in my office, and I will say most of those came from very eminent people.

Mr. HARRIS. You gave Britain as an example, I believe.

Mr. LEMKE. As restricting vivisection considerably.

Mr. HARRIS. What do you think about the provisions of the British law?

Mr. LEMKE. The British provisions, while they are very much restricted, do permit them under certain conditions to do it, but they have to show it is necessary.

I feel it is not necessary. We know we can get as good results from coyotes, and we have plenty of them.

Mr. HARRIS. I believe you said something about experimenting with cats.

Mr. LEMKE. What is that?

Mr. HARRIS. Did you mention something about cats?

Mr. LEMKE. That was the British law I was reading.

Mr. HARRIS. Would not the same argument apply as to cats as it would to dogs?

Mr. LEMKE. They do not form as close a relationship with man as the dog does. Many people like cats, but a lot of them do not. The dog is universally—let me put it this way, if I may: The dog is so intimately connected in soul and conscience with man—

Mr. HARRIS. And so are cats.

Mr. LEMKE. Not always. Some of them kill birds and they don't like them. But anyway it seems to me that unless there is some good and sufficient reason—and I am not one of those who says no good came from vivisection because as a matter of fact I do know a lot of people say none has ever come, but I am not one of those. But I do feel it is not necessary to experiment longer on dogs.

I do say this: That if the scientists will come out and be true, and you will hear the testimony shortly if we can get them on, that experiments on dogs have discovered important things perhaps, but they could have discovered most of the important things without dogs.

Mr. HARRIS. Some of them have been discovered with dogs.

Mr. LEMKE. I am perfectly willing to let the doctors testify on that.

Mr. HARRIS. We recognize the interest that our colleague has in this program which has the attention of so many people through the nation; we know that he has done a lot of work on it, but you are not a doctor.

Mr. LEMKE. I am not a doctor. I happen to be a lawyer. We have had ruts in the legal profession in every State in the Union and when a few of us tried to change we had to face the charge it was ridiculous.

Mr. HARRIS. You are not a scientist, either?

Mr. LEMKE. No. I am a lawyer myself.

I will say scientists have been in ruts, in my opinion; perhaps some were good scientists, but that profession has been in ruts.

I will give you an example: In Minnesota a certain man claimed to have discovered a method to make steel, and they said he had committed a fraud, so I went to a friend of mine, Floyd Olsen, later Governor of Minnesota, who was then a prosecutor, and I said, "You are wrong, this man has thoroughly convinced me."

He says, "I called up the dean at the University of Minnesota, and he says it can't be done."

I said, "Will you wait and see if I can get that professor to make an experiment," and he said, "Yes, I will do that."

So, I communicated with the dean and said, "I know your attitude on this subject but I want you to conduct an experiment, will you do it?"

He said, "Yes."

So, about 2 weeks later I got in touch with the professor and he said, "Lemke, it can't be done." He said, "By this system it can't be done." Then he looked at me, but he says, "Damn it, he did it."

I am just giving that to you as an example to show that the scientists are not always right.

Mr. HARRIS. Of course we recognize great discoveries have been revealed in this manner, but nevertheless we recognize that scientists have done great things also. The last one I suppose was the discovery of the atom bomb.

Mr. LEMKE. Yes, and we have made progress all along the line and so has the medical profession. I am not criticizing them at all. I am simply saying this is a rut they are in, and they ought to let the dogs alone.

Mr. HARRIS. Discoveries might be made by vivisection on dogs and other animals, is that right?

Mr. LEMKE. I will say this, that the claims to vivisection of guinea pigs and frogs, that not a single good idea has been gotten, that could not have been gotten from vivisection of frogs. I am not entering that field; I am simply saying what the claims are; I am not saying they are good.

Mr. HARRIS. To what extent is this being put in the District of Columbia?

Mr. LEMKE. The next witness will go into that.

Mr. HARRIS. You do not know whether the practice is really being used or not yourself?

Mr. LEMKE. Not personally.

Mr. HARRIS. All right. I believe you have another witness.

Mr. LEMKE. I have two more witnesses. I will call Dr. Joseph Strickland.

Mr. HARRIS. I believe the House meets at 11 this morning. It is almost 11 now, and so we are not going to have too much time. I just mention that, so that you will understand we will not have very long this morning. You might have to come back tomorrow.

Mr. LEMKE. All right. We will go on and then come back tomorrow morning.

STATEMENT OF JOSEPH STRICKLAND

Mr. HARRIS. Will you state your name?

Mr. STRICKLAND. My name is Joseph Strickland. I am investigator for the New England Antivivisection Society, Boston. I have been asked to come here to throw light on this situation——

Mr. HARRIS. May I ask you your qualifications, sir?

Mr. STRICKLAND. I am a graduate of Brown University, a former schoolmaster, and have worked with Washington organizations, associated with David Lawrence's organizations some years ago.

Mr. HARRIS. Are you a doctor?

Mr. STRICKLAND. No, sir.

Mr. HARRIS. You may proceed.

Mr. STRICKLAND. I have been asked to come here to shed a little light on the situation as obtains in the modern hospital laboratory and medical school in the metropolitan area of Boston, and I feel that the same conditions might be reasonably supposed to exist in the District of Columbia.

Prior to last night I had intended to give an extemporaneous——

Mr. HARRIS. Of course you recognize that this bill applies to the District of Columbia.

Mr. STRICKLAND. Absolutely.

Mr. HARRIS. It is my understand that this hearing was called on this bill as it affects the District of Columbia.

Mr. STRICKLAND. Quite true.

Mr. HARRIS. Personally I feel that your testimony should be limited to the provisions of the bill under consideration here.

I didn't know that we were going to have a discussion of what might be advisable up at Boston or somewhere else.

Mr. STRICKLAND. That is thoroughly understood, but it is reasonable to presume that some light should be shed on the problem, and if I can be of any assistance to the subcommittee I shall be very glad to be of such assistance.

Mr. HARRIS. Do you know anything about the situation in the District of Columbia?

Mr. STRICKLAND. No.

Mr. LEMKE. Mr. Chairman, may I suggest that vivisection has a national issue and in line with that I am satisfied that the general practice existing is practically the same in the District of Columbia. If you want some concrete evidence on the District, I think I can subpoena witnesses if you will subpoena such persons as know considerable about it.

Mr. BATES. The witness here does not know anything about the District of Columbia.

Mr. LEMKE. I thought we were discussing a bill that treats with vivisection and vivisection is a national issue.

Mr. HARRIS. This bill is not a national bill.

Mr. LEMKE. Surely you want light on it. Are you going to keep out the facts and limit it to the District?

Mr. HARRIS. Well, we might proceed.

I would like to indicate that any information you have should be presented here to shed light on this problem as it affects the District of Columbia, in that we have only about 15 minutes.

Mr. STRICKLAND. Last night I had in mind giving an extemporaneous picture of the conditions found in our modern laboratories, such as we find in the metropolitan area of Boston, and conditions found in medical schools, but on further deliberation I think that part of my remarks should be presented in the form of a prepared statement because I know they will be very carefully scrutinized.

Now as an investigator I have found no disposition on the part of medical men to hide anything, there is no secrecy about this. They have taken me into their confidence, with the hope that I would not misinterpret anything that I have seen. I have never been charged with misinterpretation to this day, and I am not going to begin this morning.

You will notice I am making frequent use of the word "suffer" and studiously avoid the word "cruelty." Cruelty according to the dictionary, is the unnecessary infliction of pain.

Now as to what is necessary and what is unnecessary, you will then have to leave to the person who is inflicting the suffering. If he be regarded as a criminal in any respect, by this criterion you make the person who inflicts the suffering the judge of his own crime.

Now I prefer to accept the statement as found in the decision of Judge Francis Ford of the United States district court relating to this problem and here is what he said:

The infliction of suffering and pain on the unwilling whether it be man or beast is cruelty.

This is part of my prepared statement.

Mr. HARRIS. How much time would you want?

Mr. STRICKLAND. Fifteen or twenty minutes.

Mr. HARRIS. You may proceed.

Mr. STRICKLAND. The public in the United States have been kept in the dark about the practice of vivisection. There has never been on any subject so much crafty and misleading propaganda to beguile the uninformed which the world has little or no conception goes on all the while. Even those who are most strongly opposed to the practice have no idea of its enormity. One must see for himself the row upon row of cages containing every variety of animal awaiting their turn. While some laboratories are relatively small, those of the more prominent institutions are equipped like a modern zoo.

Dogs are now supplied to the laboratories in carload lots. The sneak thief approaching the laboratory door to dispose of the single stolen pet for a pittance no longer typifies the true state of affairs. Today animals, bought wholesale, are in some instances brought to a central station and from there distributed or requisitioned to the various laboratories as required.

In the city of Chicago alone, in a 2-year period; 22,000 dogs were handed over to the medical schools for experiment, and, according to detailed records, these unfortunate creatures were baked, burned, starved, frozen, mutilated for purposes of practice surgery, or other-

wise mistreated. The mere statement that dogs are subjected to such treatment comes as a shock to the uninformed and at first appears like the extravagant utterance of an alarmist. However, as one who has investigated the facts at first hand, let me say that every statement can be proved.

I might say in passing that our opposition in the main are not the men who do this usually; our opponents are editorial writers who express themselves loosely and liberally about this problem and they are so conducive to our opposition that they don't take any trouble to investigate.

While stringent laws and able administration govern the dog pounds in our large New England cities, laxity in this respect is quite evident in the surrounding towns. One kennel owner on the Newburyport Turnpike who has long supplied the laboratories told me that she had no difficulty whatever in securing her requirements from local Massachusetts dog catchers. For these animals she paid from 75 cents to \$1 apiece, fed them a few weeks, and disposed of them to the medical schools. Under such conditions no dog is safe from the hands of the avaricious dog catcher who knows there is a ready market for his catch. Some day your dog may become lost, bewildered, and snatched. Then, and only then, will you realize that it is not any dog that is bound to the vivisection table. It is not an abstract dog to be pictured only in the imagination. It is yours.

The average mind is too languid to think for itself on an ethical problem of this character. It believes as it has been taught and it resents having its settled convictions disturbed. While there are still a few people who have no pity for suffering animals, cruelty on the whole is condemned as never before, and there are few men and women of good breeding and humane instincts who are not troubled in heart and mind once they learn of the terrible experiences and suffering of dogs used for experimental research. Cruelty is one vice that is universally despised. The sinister influence of vivisection lies deep in the conscience of many who practice it as well as those who condone it. Were the public properly informed of the facts it would shake off its apathy and call for a reckoning.

Now, as an investigator, I am not going to misinterpret. I know that I can take a set of facts and I can present them in one way, and you may present them in another, but I have always studiously tried not to misinform people. It is very easy to do that. I know that.

I saw eight puppies in which jaundice had been induced take their turn on the table to confirm facts long established. These once healthy animals were rendered sick in order to ascertain how much glycogen could be stored in their livers by artificial intravenous injections. By tying off a common duct leading from the gall bladder and subjecting the dogs to a 2 weeks' starvation diet their eyes and bellies became yellow.

Now, I have to inject a little personal element into this, but last summer I was sick for the first time in 35 years; it so happened that I caught a case of jaundice myself.

I do not need to tell these physicians that I suffered the tortures of the damned.

When I approached this problem a few years ago I looked on with the cold eye of an observer. I am not an animal owner. I have never

owned dogs; I am not a sentimentalist. The very fact that I can witness these things which I have done on hundreds of occasions, shows that I am not squeamish about it. I am merely giving you the facts of the case.

I did last summer suffer the tortures of the damned, scratching from head to foot; I could not sleep nights; I lost 35 pounds, and thank God I have recovered it. I do know about that problem. I can assure you that I am quite convinced in my own mind that those puppies did suffer.

Now you can take that or leave it.

Dr. Anton Carlson of Chicago made a statement to this effect:

The suffering entailed in one hunting and fishing season far exceeds all the suffering inflicted on animals in all laboratories through all the centuries.

There is no criterion for measuring that in fishing; we are not discussing that.

In several laboratories I have seen the repeated use of the same animal merely for acquiring skill in operation. This practice is forbidden by law in England.

An evil somewhat veiled in secrecy is the formation of surgery clubs held in hospital laboratories with the knowledge and consent of medical school authorities. This practice is not advertised in the college catalog as a regular part of the curriculum but is carried as an outside activity. In such cases the dog is used over and over again purely for reasons of economy.

The claim that animals held for recovery are given the same treatment that a human being receives in convalescence is grossly exaggerated. On several occasions I have seen them lifted out of the operating trough and laid on a dirty concrete floor to drag themselves around and become infected as a result, nullifying thereby all the preliminary precautions of asepsis.

On one occasion I saw a dog brought into a Boston laboratory drowsy and drooling from a liberal dose of morphine. It struggled and whined desperately against the ether anesthetic. At last passing with violence through what experimenters call the "excitement stage" it was quiet, and the vivisectors opened its abdomen.

There followed a gruesome procedure, the details of which I will omit here. The dog, on being sewn up was debarked, the vivisector prying its jaws apart with a metal slab, inserting a knife and severing the vocal cords.

I saw another example of the use of morphine when on one occasion I witnessed the muddling through of a prolonged, ghastly, and futile experiment on a dog. It took so much more time than the experimenters anticipated that the prearranged plan to operate also on a fresh dog was abandoned. This second animal, however, had already been subjected to the temporary shot of morphine.

"Oh, well," remarked one vivisector, after his own brand of humor, "the dog will just be enjoying another jag."

Vivisectors would have you believe that all vivisection is for the sake of humanity, but when an experimenter is tampering with a group of dogs it does not always follow that he expects to apply his knowledge to the alleviation of human suffering.

In many cases he is merely attempting to perfect a technique that can be handed on to fellow experimenters for their further use in the laboratory.

When the late Dr. Crile set the fashion of denervation or removal of the adrenal glands as a means of controlling high-blood pressure, hundreds of experimenters followed his lead and dogs were sacrificed wholesale, despite the objections, raised by conservative authorities, that operation on this gland is an exceedingly hazardous procedure and the mortality rate most discouraging.

Vivisection is not alone confined to animals but is increasingly practiced upon the less fortunate among human beings.

The antivivisectionist has no quarrel with any properly authorized practitioner of medicine using his best judgment to alleviate the morbid condition of his patient but the practice of walking from the animal house to the hospital ward to transfer data obtained with the dog as applicable to the human being is subject to grave concern.

Vivisection today is in the hands of a comparatively small but influential body of men who should be distinguished from doctors generally, few of whom have any active part in it. There is evidence that many of these men would themselves protest against most of the cruelties and fallacies of vivisection were it not for the control now held over them by medical associations and for fear of lost prestige due to their out-spoken opposition. In Great Britain where individual thought tends to be more independent and the herd instinct not so pronounced, it is interesting to know that 2,000 medical men withdrew from the British Medical Association in a body as a protest against the prevailing methods of research.

Those directly engaged in the use of animals for experimental purposes have no confidence in the public judgment of the moral issue of vivisection and for that reason ably seek to cover up the true situation or misrepresent the case by exaggerating the benefits to be derived therefrom. In other words, the public has been blinded by scientific dust thrown into its eyes. The public is taught to believe that vivisections are rare—that animals are always under anaesthesia and that discoveries are of inestimable value to society.

The dramatic effect of the promised benefits to be derived seems to have caught the imagination not only of the press and the screen but has even led the pulpit to condone as a benefit to society what would ordinarily be considered a blot on civilization. However, if the press and the clergy would examine the facts in the case instead of blindly accepting the propaganda, I am sure that both professions would rise up sufficient men of courage and integrity to fight its evils.

Moreover, what can be said of the tragic implications of this situation which permits members of a civilized society to be led by false propaganda into the belief that the practice of vivisection is designed to promote the happiness and welfare of humanity. Finally there is the unspeakable system whereby largely through the instrumentality of sneak thieves that flourish in our community, the needs of the directors of animal experimental laboratories are supplied. For these sneak thieves we have the greatest abhorrence but it is not unmixed with a certain pity.

For the directors of the laboratories however, who encourage this miserable and criminal business by receiving and paying for stolen property—there can be no extenuation either before the law or in the

opinion of decent normally minded citizens. The tragic fact is that thus far they have not only escaped the legal penalties for their misdeeds but to an appreciable measure the public odium which shall be their lot.

Now, for the purpose of clarifying this issue, it is estimated, and there are no figures, there are none known, but it has been estimated that 500,000 dogs alone are used for this purpose every year in modern experimentation.

Mr. BATES. If the figures are not known, how do you arrive at that conclusion?

Mr. STRICKLAND. I have been frank to say that this is an estimate.

It was estimated some years ago and presented before a subcommittee hearing by Dr. William Howard Hay. I share no responsibility for that estimate, but we do know, as I have clearly shown here, that 22,000 dogs have been used in Chicago alone, delivered to experimental medical schools in one year.

Mr. HARRIS. Mr. Chairman, if I may, I would like to state for the record that the hearing that the witness referred to was May 1930 at which estimates were given to a subcommittee.

Mr. STRICKLAND. I would just like to make this statement as to this highly controversial problem: The delivery and sale are inseparably tied up with the problem.

Now, in the case of one kennel on the Newburyport Turnpike——

Mr. BATES. Will you give the name there?

Mr. STRICKLAND. I'm very glad to. As a matter of fact I never hide anything; I pride myself on having some integrity about this.

Mr. BATES. You are from Boston?

Mr. STRICKLAND. I am from Boston.

Delaney, by name, a kennel on the Newburyport Turnpike, as you turn up you will see a sign, "Home for Homeless Pets."

I know, as a matter of fact, dogs brought in one day are thrown in a truck the next morning and taken away.

Mr. BATES. Where are they taken to?

Mr. STRICKLAND. Largely to Harvard and Tufts Medical Schools.

Another kennel, Belecke by name, I went in his yard on one day and I have seen his truck with so many cases going out.

This man brought his bill of sale to my attention. He had no obligation to, because he might have ordered me out of his place, but I took him by surprise, and there was no subterfuge about it.

I have never sneaked into a laboratory; I have always walked in the front door. I do not like the sneaking practice, and I would not give much credence to anybody who would give any testimony based upon anything but a straightforward presentation of the facts.

He showed me his bill of sale, and told us that in one month he had delivered 100 dogs to one medical institution, and that did not happen to be the large number.

I might close with this statement because I know these remarks will be very carefully scrutinized: Anything I have said today has been said with the feeling that we need to clarify this picture I hope that the committee will scrutinize everything that is said here today and at least give some consideration to our side.

For over 40 years antivivisectionists have talked before the District of Columbia; we don't hide anything.

Mr. BATES. Mr. Strickland let me ask you this question: You come from Massachusetts and apparently present the conditions existing in that State. You mentioned in your statement that if these conditions are brought to public attention the situation will apparently be clear.

During this long period of years you have been engaged in this work work—I am not—I am just asking the question, I am not passing judgment one way or the other—has this matter been brought before the legislature of Massachusetts, and, if so, what happened?

Mr. STRICKLAND. There is a bill pending this year before the legislature, on which a hearing will take place on March 11.

Mr. BATES. That is the first hearing that has been held?

Mr. STRICKLAND. In recent years our president has thought that, due to the troubled times, that it was rather unfair to inject this issue.

Mr. BATES. How many years ago has it been since they have held any hearings, on the kind of testimony you have presented here to the committee this morning?

Mr. STRICKLAND. There have not been any.

There was a hearing last year that was not sponsored by our society.

Mr. BATES. I would like to get your name.

Mr. STRICKLAND. Joseph Strickland.

Mr. BATES. You come from Boston.

Mr. STRICKLAND. I come from Boston.

Now Mr. Cunningham, who is here from Baltimore on an investigation with respect to interstate traffic in dogs.

We found in many of our institutions in Boston crates were piled up behind the animal house; many of these various people had sent their dogs from outside the State, and our president thought it wise to submit these facts, and Mr. Cunningham took occasion to inquire into this practice with reference to the shipment of dogs from Maryland and Pennsylvania to Massachusetts.

I take it you are Mr. Bates?

Mr. BATES. Yes.

Mr. STRICKLAND. I am quite sure you would be interested in what he has to say along this particular line.

Mr. BATES. I was a member of the legislature myself for 7 years; I was born in that State and lived there all of my life.

I am just anxious to know, on the basis of the testimony you have given here, why you or your organization has not brought the same testimony to the attention of the members of the legislature of that State.

Mr. STRICKLAND. I can assure you it will be presented in March.

Mr. BATES. I know that, but why hasn't it been said before? This is not anything new.

My question is why you did not present this evidence which you have presented here, present it to the Legislature of Massachusetts which would have jurisdiction over a matter of that kind.

The legislature would have authority over whatever activities were being carried on within the Commonwealth of Massachusetts.

Now, you say that these facts have never been brought to the attention of the members of the legislature.

Mr. STRICKLAND. That is true, but March 11 they will be I am sure.

Mr. BATES. Well, how long have you had this testimony?

Mr. STRICKLAND. This was gathered over a 10-year period.

You see, I am regularly employed by the society——

Mr. BATES. In Massachusetts.

Mr. STRICKLAND (continuing). As investigator.

Mr. BATES. You have had a good deal of this information during this past period.

Mr. STRICKLAND. Yes.

Mr. BATES. You are coming down here and presenting this testimony to this committee when as a matter of fact you never did present it to the State legislature, so that they would take jurisdiction.

Mr. STRICKLAND. It just so happens that this hearing came before our hearing.

Mr. BATES. I am talking about in the last 10 years.

Mr. STRICKLAND. I have been taken first by our president——

Mr. BATES. I am not finding fault.

Mr. STRICKLAND. Several people have written to you asking your support for various types of bills, and I want to congratulate you in this respect, that you have always written to them straightforward and without subterfuge and told them what you think.

Mr. BATES. I never told them I would favor this bill.

Mr. STRICKLAND. Yes; I know that.

Mr. BATES. I do not want to leave that inference.

Mr. HARRIS. Mr. Strickland has testified to conditions that he is familiar with and has brought to the attention of this committee such things that in his mind should be prohibited, but I want to remind him and the committee and those interested that this legislation proposed here affects only the District of Columbia; it affects no other section of the country whatsoever.

Mr. BATES. He has presented conditions existing in Massachusetts as a basis for supporting this legislation, but at the same time admits that all the while he has had all of this information over a period of 10 years and has done nothing about it, did not present it to the legislature so that it might be considered.

Mr. HARRIS. That is all.

The CHAIRMAN. I will read into the record a letter from the Medical Society of the District of Columbia.

With respect to H. R. 5572, a bill to prohibit experiments on living dogs in the District of Columbia and providing a penalty for violation thereof, I am writing to inform you that the executive board of this society voted at its meeting on January 29, 1946, its unanimous disapproval of this legislation. In its opinion there can be no justification for enactment of a bill which would obstruct scientific progress, thereby jeopardizing the lives of untold numbers of human beings.

Our society will be represented at hearings to be held by your committee by Dr Joseph S. Wall, chairman of our committee on public policy, who is competent to speak on the issues involved in the legislative proposal before you.

That is signed by William Earl Clark, president.

Mr. McGEHEE. The committee will stand adjourned until 10 o'clock tomorrow morning.

(At 11:20 a. m. an adjournment was taken until the next day, Friday, March 1, 1946, at 10 a. m.)

PROHIBIT VIVISECTION IN THE DISTRICT OF COLUMBIA

FRIDAY, MARCH 1, 1946

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE OF THE COMMITTEE
ON THE DISTRICT OF COLUMBIA,
Washington, D. C.

The subcommittee met at 10 o'clock a. m., Hon. Dan R. McGehee presiding.

Mr. McGEHEE. The committee will come to order. The first witness this morning will be Congressman Angell.

STATEMENT OF HON. HOMER D. ANGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. ANGELL. Mr. Chairman and gentlemen of the committee, for the purpose of the record, my name is Homer D. Angell. I am the Representative of the Third Oregon District, Portland, Oreg.

My interest in this problem is that for some 20 years or more I have been a member of the Oregon Humane Society, and I am deeply interested in this whole program.

I realize this is a bill having to do with the District of Columbia. The District of Columbia is a part of the United States and we in Congress have control of the District and the people throughout the United States furnish taxes to help run the District, so it does have some national interest.

I believe there are some 20,000 people in my district who have signed a petition to present this bill for action.

I realize you gentlemen on the committee are the ones to make the decision but I might say in passing, as I am leaving immediately, I understand there are other witnesses to appear—but I think in the last war it has been demonstrated more than any time previously in all the history of civilization that the dog is one of the greatest friends of humanity, and I believe that anything that we can do to protect the rights of dumb animals, particularly dogs and horses of various kinds, is a humanitarian move.

And therefore this proceeding is one which should appeal to the conscience of all of us. I know we who are sponsoring the objective of this deeply appreciate the development of science and what science has done for humanity, but I do sincerely believe that the same objectives can be reached without cruelly treating dumb animals.

I think we saw in this last war how the Nazis themselves, instead of using dumb animals used individuals, human beings, and they were subjected to the very same treatment that dogs were subjected to on down through the years. You will recall how human beings were frozen for experimental purposes, how they were impregnated with

disease germs of various kinds, and how they were subjected to the very same treatment that these dumb creatures are subjected to.

Therefore, Mr. Chairman and gentlemen, I sincerely trust that you will give favorable consideration to reporting out this bill so we will have an opportunity of considering it on the floor.

Mr. McGEHEE. Dr. Fishback.

STATEMENT OF DR. FREDERICK COLEMAN FISHBACK

Mr. FISHBACK. My name is Frederick Coleman Fishback. I am a graduate of Harvard Medical School and Professor of Clinical Surgery, Georgetown University School of Medicine.

It may interest you gentlemen to know that this is the fiftieth anniversary of the first bill of this sort introduced into Congress. During the intervening years, similar bills have been coming up from time to time and on some occasions there have been hearings like this one today. The last hearing was held in 1940 before the entire House District Committee with Mr. Randolph presiding and listed only an hour since none of the proponents of the bill appeared in its behalf.

As chairman for the opponents of this bill, I shall ask our witnesses to qualify themselves as they come up to speak with regard to their education, training, and present occupation, as indication of their fitness to speak with authority. May I point out that we have no organization or funds to pay for gathering witnesses or testimonials. We are engaged in the broad field of medicine, either as practitioners, teachers, or investigators. We come here of our own free will to speak against this bill.

The crux of this bill as of its predecessors, asks you to assume two things, first that dogs are treated cruelly, and secondly that no good has ever resulted from any experiment on dogs or other animals. I believe that we shall show both of these assumptions to be false, and furthermore that the dog himself, has benefited as the direct result of the research in which he has been used. During 2 years of my graduate training, I was first assistant in experimental surgery at the Institute of Experimental Medicine of the Mayo Clinic. During that time, I saw many, many dogs operated on, but in no instance without the benefit of complete inhalation anesthesia. The care of dogs both before and after operation, was as good as that enjoyed by a human patient in a hospital. Other witnesses will corroborate this statement regarding the kindness and quality of care given dogs in laboratories. The reasons why a certain specie of animal is selected for a certain type of experiment will be amplified by our witnesses.

These people would have you believe that no one good thing whatsoever, has ever come from experiments on animals. I ask you gentlemen where does the cruelty lie, in these scientists who humanely use animals to end human suffering, or with these people, the proponents of this bill, who by stopping animal experimentation would deny humanity an indispensable weapon against the scourges that still beset it.

In passing, I cannot refrain from comment on the phraseology of this new bill H. R. 5572. The earlier bills, identical until H. R. 5572 came along stated that—

after the passage of the act, it shall be a misdemeanor for any person to experiment or operate in any way whatsoever upon any living dog, for any purpose other than healing or curing of said dog in the District of Columbia.

The new bill reads, as you know, the same with the exception of the phrase, "except operations normally performed for the convenience of the owner." We leave it to the committee as to what that means but it seems to us that this attitude is not characterized by consideration of the dog's feelings in the matter so much as the selfish intent of the owner.

When we are through, I have one final word, if there is any slightest, lingering doubt in the mind of any member of the committee that we have not answered all charges, insinuations, and innuendoes fully and completely, with the very limited time at our disposal, I beg you not to close this hearing without giving us further opportunity to complete our evidence.

I would like to call my first witness, Dr. Alfred Blalock, professor of surgery, at Johns Hopkins. It is with a great deal of pleasure that I have Dr. Blalock here to show the benefits that come to children and dogs.

**STATEMENT OF DR. ALFRED BLALOCK, PROFESSOR OF SURGERY,
JOHNS HOPKINS MEDICAL SCHOOL, CHIEF SURGEON OF JOHNS
HOPKINS HOSPITAL, BALTIMORE, MD.**

Dr. BLALOCK. Mr. Chairman and Members of the committee, due to the short time at my disposal, I shall not speak of much of the work which has resulted in benefit to mankind.

Much benefit to dogs as well as to man has come from experimental work. Large animals such as dogs are necessary for some types of work, such as blood vessel anastomoses, if the results are to be applied to man.

I shall speak of only a few of the experiments which have resulted in great benefit to man.

1. The causes for the formation of water on the brain, or hydrocephalus, in children was determined in experiments on dogs. Means for treating this condition in children were devised on dogs by Dr. Dandy, and as a result the lives of many children have been saved.

2. A technique for the successful removal of the esophagus was developed by Saint and Mann in experiments on dogs. This technique has been used in hundreds of patients.

3. The method for removing a lung or a lobe of the lung was developed in experiments on dogs. The method by which the air tube leading to the lung could be closed following the removal of the lung was perfected in experiments on dogs. Literally thousands of patients are living today following a removal of the lung or a part of the lung because of a tumor or infection.

4. An operation for increasing the blood flow to the heart muscle was developed in dogs. Heart disease of this type in which the circulation is impaired is probably the most common cause of death in man.

5. The accepted ideas regarding the treatment of pus in the chest cavity has resulted from work on dogs. This work was performed by Drs. Graham and Bell in the First World War. Countless lives have been saved as a result of their findings.

6. What we know about ulcers of the stomachs and duodenum is largely due to surgical experiments on dogs. The extent of the removal of the stomach that should be carried out in the treatment of an ulcer has been determined on dogs.

7. Methods by which parts of the intestinal tract can be most safely removed have been developed in dogs. As a result this operation is now associated with a rather low mortality rate.

8. The role of the kidneys in the causation of high blood pressure was demonstrated on dogs.

9. Our present conception of traumatic or surgical shock has been derived largely from work on anesthetized dogs. It was necessary to use these animals in much of this work since they react to injury in a manner similar to man. Furthermore, the changes in the circulation can be studied. The use of blood plasma in large quantities in the treatment of shock was first employed in dogs. I know this to be true because I was one of a team which carried out the work. The use of blood plasma in the military forces has resulted in the saving of thousands of lives.

10. I have mentioned only a few of the ways in which experimental work has resulted in the saving of human lives. Incidentally, this work has resulted in the saving of the lives of many dogs. But I am referring particularly to the effect on man.

Since I am a surgeon, I have chosen to stress the findings that have been particularly helpful in this field. Many important discoveries in dogs such as the use of liver extract in anemia and of insulin in diabetes have not been stressed but are very important.

The final point which I wish to mention has to do with some work which Dr. Taussig and I have been doing recently on blue babies. These children are blue and are unable to exercise because of a deformity of the artery which transmits blood to the lungs. The lungs are the only place in the body where the blood can take up oxygen. Since only a limited quantity of blood can get to the lungs, there is inadequate oxygen in the blood. We devised an operation in dogs whereby a greater quantities of blood could reach the lungs.

I have here a model of the human heart [indicating] which I brought along since I could not very well show motion pictures or slides.

There are two sides to the human heart, the right and the left. There are two major blood vessels which leave the heart. One of these is called the aorta, which carries red blood to the body. It carries blood to all portions of the body except the lungs. That vessel is shown here in red [indicating]. The blood which is pumped through it has been to the lungs and is pumped to the body to supply it with oxygen.

That other blood vessel leaving the heart is the one that goes to the lungs [indicating]. This is the pulmonary artery. It is this vessel which is constricted right at the point it comes off of the heart, in the so-called blue babies. They are not able to get enough blood to the lungs to take up enough oxygen so that they can walk and run and play normally, and they have this blue appearance.

It is impossible to do anything about the point of constriction at which this vessel leaves the heart.

So that we took this problem to the experimental laboratory, using it on anesthetized dogs, trying to devise a means to get more blood to the lungs of these children.

The method which we worked out on anesthetized dogs was this:

There are three large vessels that arise from this big vessel going to the body.

We took one of these vessels and divided it at a distance from its point of origin and then connected this end which is toward the heart to the pulmonary artery; so the blood which came up through the aorta, a part of it could be bypassed to this blood vessel going to the lungs.

In other words, it is just as though a gas line were blocked and we bypassed it and connected it beyond the point of obstruction.

Now, the point is this:

That in the first place, we did not know whether or not that would do any good until we had tried it.

In the second place, we could not have done it with any degree of safety on somebody's child before having practiced it on some experimental animal.

I can state without fear of contradiction that no surgeon would dare to perform this operation on a child without having performed it on dogs. Thus not only were the principles of the method worked out on anesthetized dogs, but it will be necessary for those surgeons who have not performed the operation to attempt it on one or more dogs before attempting it on some child. Cats and rabbits and rats are not satisfactory for this purpose because of the small size of the blood vessels.

So after having performed this on a certain number of anesthetized dogs we then talked to the parents of some of the children who were in this condition, told them that this was still in the experimental stage, that it had not been tried on man, that we knew we could do the procedure in dogs and that we thought that it would be helpful to their children. At least, that we had progressed to the extent that it helped these animals if this bypassing operation were done.

Now, the first operation on a child was carried out some 15 or 18 months ago, and I have asked three children who live in this area, together with their parents, to come here today.

The first of these is Jackie Burke. His mother Mrs. Burke is with him.

Jackie was, I think, the fourth or fifth child on whom we operated, and his operation was about a year ago, Mrs. Burke?

STATEMENT OF MRS. AMELIA BURKE, ACCOMPANIED BY JACKIE BURKE, WASHINGTON, D. C.

Mrs. BURKE. Just about a year ago.

Dr. BLALOCK. And at the time of his operation—before his operation he was very disabled. His lips were blue. But, Mrs. Burke, would you tell the gentlemen about that?

Mrs. BURKE. Jackie could not run or play or walk any distance at all without becoming exhausted, and his lips and fingernails would become very blue and he had to just sit down and could not walk across to the table. And now since his operation he is perfectly fine, he can play about and enjoy himself.

Mr. BATES. Doctor, just what do you do in this case?

Dr. BLALOCK. What we did was to make an incision here in the right chest [indicating]. Perhaps you can see the scar, incision there [indicating].

This incision extended into the cavity of the chest. We then exposed the artery going to the lung which was carrying very little blood, and we connected to it this biggest vessel arising from the arch of the aorta and connected it to the side of this vessel so that blood would pass

from this high-pressure zone into this artery to the low pressure zone in the artery going to the lungs.

In other words, before operation he had a very inadequate quantity of blood going to his lungs and hence there was not sufficient blood going there to take up enough oxygen to have it so that Jackie could run and play. And his lips were blue and his fingernails were blue and the ends of his fingers were like clubs.

And now I think you can see that they are pink and that they are not clubbed.

Mr. BATES. Do you think the child is normal now in every other way, doctor? He looks pretty good to me.

Dr. BLALOCK. Well, I might say this, and I think that Jackie will not mind my saying it, that something had happened to Jackie 2 years before this operation that happens to a lot of these children who are not operated on. The blood in this condition before operation is practically—

Mr. BATES. Pardon me. I think we ought to keep this off the record.

(Discussion off the record.)

Dr. BLALOCK. Mr. Rinaldi.

STATEMENT OF P. G. RINALDI, ACCOMPANIED BY HIS SON PAT, WASHINGTON, D. C.

Mr. RINALDI. Pat was in a bad way. His lips were black. Once somebody asked him where he got the blueberries, which then would not be due for about 6 months.

It was quite a problem. I was doing convoy duty in the Atlantic and I was able to get home only every 3 or 4 months, and it was a sore disappointment to me to see how he was going down the scale. And I can say that if this operation had not taken place I doubt very much whether he would be here now.

(Addressing the child Pat.) These people want to know about what the operation did for you. Are you able to do some of the things you were not able to do before? Can you ride a bicycle now?

PAT RINALDI. Yes.

Mr. RINALDI. Can you pull Billie in a wagon?

PAT RINALDI. Yes.

Mr. RINALDI. Previous to the operation the only thing he could do, gentlemen, was probably walk across a 15-foot room, and then he would flop himself on a sofa and just lie there until he got his breath back.

His eyes were constantly bloodshot, and you can see how they are now. The contrast in the deep blue and the red bloodshot eyes was very startling.

Depending on the weather and his condition at the time he may have had two or three spells a day. These spells would be sort of a coma, and there was nothing we could do but straighten him out and hold our breath, not knowing whether he would come out of it or not.

Mr. BATES. That was the same operation there?

Dr. BLALOCK. Yes.

Mr. BATES. And the boy has good health today?

Mr. RINALDI. Yes.

Dr. BLALOCK. This patient is Richard Willis who lives in Alexandria.

STATEMENT OF MRS. HOWARD A. WILLIS, ACCOMPANIED BY HER SMALL SON, RICHARD WILLIS, OF ALEXANDRIA, VA.

Dr. BLALOCK. Will you tell us what you can do that you could not do? Anything you want to.

RICHARD WILLIS. Well, I could not walk up a whole flight of stairs. All I could do was walk up two stairs and then sit down.

Dr. BLALOCK. What can you do now?

RICHARD WILLIS. I can run and walk and ride and do anything now.

Dr. BLALOCK. Any questions?

Mr. BATES. You believe the operation helped a good deal, do you?

Mrs. WILLIS. Yes.

Mr. SMITH. I am a friend of the family and in the absence of Mr. Willis I came over this morning.

They are neighbors, they are part of my household, so to speak, because my own children have been his only playmates.

He was limited to an area less than that table [indicating]. Now he is cutting up and playing always.

Mr. BATES. And the mother subscribes to that statement?

Mrs. WILLIS. Yes.

Mr. BATES. That is all, Doctor.

Dr. BLALOCK. The only thing I have to say in concluding this is that in the first place this work would not have been done had it not been possible to use anesthetized dogs for experimental work.

Now furthermore, sir, I would like to say that I defy any surgeon in the country, regardless of his training or attainments of various types to attempt this sort of an operation until he has done it on more and more experimental animals. I do not believe that any conscientious surgeon, regardless of his skill, would have the temerity to attempt this on someone's child without having had access to a laboratory.

Mr. BATES. Now, if it was not possible, in your opinion, Doctor, to perform successfully this operation, what would have happened to those three children, in your opinion, knowing the physical condition of the children before you operated?

Dr. BLALOCK. I can say that statistics show that these children rarely live beyond the age of 12. But many of them do not live to that age.

I think that the first two children who were shown would have been fortunate had they lived a year or two. I think the third child who was shown who was not as ill as the first two, that he might have lived 6 or 8 years. But I am confident that they would not have grown to adulthood.

Mr. BATES. Is that all, Doctor?

Dr. BLALOCK. Yes, sir.

Mr. BATES. Who is your next witness?

Dr. FISHBACK. My next witness comes as a representative of Dr. Norman T. Kirk who is unable to be here. I have a statement which he submitted for the record.

(The statement referred to follows.)

BENEFITS TO MILITARY MEDICINE FROM ANIMAL EXPERIMENTATION

(Maj. Gen. Norman T. Kirk, Surgeon General, U. S. Army)

The contributions of animal experimentation to advances in the care of sick and wounded and the prevention of disease during World War II were enormous. It can be shown beyond question that the saving of thousands of soldiers, the mitigation of an incalculable amount of pain, and the preservation of the high degree of the health of the Army were due in predominant measure to experimental researches in which animals were used.

The care which the American soldier received in World War II was better than any soldiers had ever before received. It was a combination of many factors: The prompt performance of competent surgery as soon after wounding as possible; the application of medical care within a framework of specialization; the safe and speedy evacuation of the wounded; the ready and judicious use of plasma and blood transfusion; the availability and wide employment of effective chemotherapeutic agents. The results of this professional care, in terms of lives saved and men returned to useful ways of life, are very well known. * It is not so well known that these results did not just happen, that they are attributable to careful planning, based on accurate scientific principles, which in many instances were themselves based on observations made in animal experimentation.

The mortality and morbidity rates of many special conditions in World War II were greatly reduced over the rates obtained in the last war, and sometimes over the rates obtained in civilian practice. Shock is the outstanding example. In any wound of consequence which does not immediately cause death, the control of shock is the first therapeutic procedure, and in one sense the most important of all procedures: A man who cannot be brought out of shock cannot be actively treated for his injuries, and none of the other surgical advances which have been made can be applied for his benefit.

But shock is a profound physiologic disturbance. Its clinical manifestations can be studied in the human subject, but its mechanism cannot be. On the other hand, until its mechanism can be correctly assessed, intelligent therapy to correct it cannot be applied. Shock has been produced in literally thousands of dogs, under controlled conditions which could never be duplicated in human subjects, and the observations made in those studies have provided the physiologic background of the modern concept of shock. With that knowledge, imperfect though it still is, the rationale of therapy has begun to be understood.

During World War II the administration of plasma as a first-aid measure was the first treatment given to shocked soldiers to prepare them for operation. But plasma was not enough; it was merely first aid. As soon as the patient could be removed to an environment which permitted more elaborate measures, whole blood was given.

As the result of those two measures surgery could be attempted, and carried out successfully, which could not have been considered without them. But again the administration of plasma and of blood had been studied under controlled conditions, in animal experiments. They were not given by trial-and-error methods. They were always administered according to the indications in the individual case, but quite definite directives could be issued for their use, because definite conclusions had been derived from the animal experimentation which had been done. The American soldier received the benefit of those studies; they were applied to him, not tested on him.

The benefits of animal experimentation were most notable in shock, because it is the actual or potential result of all serious wounds, but similar benefits were obtained in many other phases of military surgery. Gas gangrene had a smaller incidence in World War II than in World War I because better initial surgery was done. But it still occurred, and it would have carried a far higher mortality rate than it did had it not been for the studies made on animals. Gangrene occurred in fewer wounded soldiers with vascular injuries, and the results of vascular surgery were better, because experimental vascular surgery had been practiced on dogs.

Neurosurgical procedures were done in World War II which were impossible in World War I because of the development of fibrin film and fibrin foam and the testing carried out with them on animals.

Wounds healed more rapidly, and wound infection was less, because wound closure had been studied in dogs.

Burns had a smaller mortality in the Second World War than in the First, in spite of a higher incidence and more terrible weapons of destruction, because of the pathologic and therapeutic studies made on animals.

The sulfa drugs and penicillin were first tested on animals, and animal studies contributed to a better understanding of their precise place in war surgery, including their limitations and their possible untoward effects.

From the field of preventive medicine hundreds of examples can be drawn to show how animal experimentation has given the knowledge and products used to protect the health of soldiers.

Development and production of biologics, smallpox vaccine, diphtheria antitoxin for treatment, diphtheria toxoid for immunization, tetanus antitoxin, tetanus toxoid, typhoid vaccine, influenza vaccine, a new vaccine against Japanese B encephalitis, plague vaccine, cholera vaccine, and typhus vaccine are essential for the preservation of the health of the Army, for the protection of soldiers against infectious diseases, and in some cases for the treatment of soldiers who have become infected. Each one of these biological preparations was developed by a long series of experimental researches in which animals were used. The standardization and control of potency of these preparations require the use of animals.

For the proper use of many preparations, such as insecticides, materials for impregnation of clothing, and compounds used for various purposes, it is necessary to know whether or not such materials are poisonous before they can be supplied for use by troops. To determine toxicity and safety factors animal experimentation is absolutely essential. For example, animal tests were required in a long series of studies to determine the possible toxicity of DDT before this powerful insecticide could be recommended for use by soldiers.

In industrial military hygiene, occupational health, and in connection with the problems presented by workers exposed to a great variety of substances in plants manufacturing materials needed by the Army, studies are required to determine the actions and poisonous qualities of many compounds. These factors cannot be obtained without animal experimentation. On the basis of the results of these tests on animals, safety measures are developed and essential war work is protected and advanced.

Animal experimentation has contributed a great deal of important basic knowledge in the field of nutrition. The situation is summarized by nutritional authority as follows:

"The best fed Army in the world" is not just another idle American boast; it is a fact about the Army of the United States. It would not have been possible for the Surgeon General to write the prescription for the Army's excellent diet without animal experimentation. The body requirement of every basic nutrient in that diet was determined by years of experimentation, mostly with animals. The exact role of vitamin C in preventing scurvy was learned in studies on guinea pigs; nicotinic acid in relation to pellagra was worked out with dogs; protein requirements and the essential amino acids were learned about by studying their effects on white mice, rats, rabbits, and monkeys; that thiamin will prevent beri-beri was proved on chickens and pigeons as well as other animals; and even today when a new food is created, its nutritive value must ultimately be determined by bio-assay (the determination of its ability to prevent disease and maintain normal growth in animals). Captured food articles are intensely studied in a continuous effort to find ever better food for our troops and the methods of study always include animal experimentation. The science of nutrition owes its present state of development to thousands of animals.

In this enlightened age it would scarcely seem that any defense of animal experimentation would be needed. If, however, it should be, it is supplied by the thousands of American soldiers alive today who otherwise might have died.

-Dr. FISHBACK. Dr. Stanhope Bayne-Jones, representing the Surgeon General of the United States. He is Deputy Chief of the Preventive Medicine Service, Office of the Surgeon General.

Dr. Bayne-Jones.

STATEMENT OF BRIG. GEN. STANHOPE BAYNE-JONES, DEPUTY CHIEF, PREVENTIVE MEDICINE SERVICE, OFFICE OF THE SURGEON GENERAL, UNITED STATES ARMY, REPRESENTING THE SURGEON GENERAL

General BAYNE-JONES. Gentlemen, I am Brigadier General Bayne-Jones, Deputy Chief, Preventive Medicine Service, in the Office of the Surgeon General of the Army.

I was graduated in medicine from Johns Hopkins and was formerly dean of the Yale Medical School.

I have a statement from General Kirk which Dr. Fishback has passed onto you. I would like to refer to that in conclusion without reading the whole statement.

I would like with your permission to refer to something said yesterday and explain in the record, a statement of the attitude of the Cornell University Veterinary College.

Yesterday it was mentioned that a graduate of Cornell had said that there was no use or no particular advantage to be gained in using dogs. I have two statements that show the veterinary opinion on that subject. One is a telegram I would like to read and lay in the record, from William A. Hagan, dean, New York State Veterinary College at Cornell. He states [reading]:

Only official statement from this college relating to vivisection is a resolution supporting research work on dogs in medical schools and universities in New York State. This was passed unanimously by the veterinary faculty meeting on February 8, 1946, and addressed to the legislature of this State. The value of such research to the welfare of mankind and that of dogs themselves is fully realized by this faculty and we are strongly opposed to all efforts to limit or prevent such research work.

I have also, sir, a statement of the resolution that was adopted by the Alumni Association of the New York State Veterinary College, in which, among a number of points, they take up the statement that the dog in their opinion is an indispensable animal for research both for benefit to human beings and to animals themselves.

Dr. Blalock did work on pernicious anemia with Dr. Whipple. And of course that whole subject is of tremendous interest to the Surgeon General and the people concerned with the care of wounded and those who have lost blood; and also, the actual study of pernicious anemia is important. And I would like to refer to something that occurred in New York the other day, these dogs depicted by Dr. Whipple are descendants of the two outstanding dogs for which Dr. Whipple was given part of the Nobel Prize.

Now, to refer to the statement of General Kirk. I shall only refer briefly to a few sentences in this and leave the rest for the record.

General Kirk states:

The contributions of animal experimentation to advances in the care of sick and wounded and the prevention of disease during World War II were enormous.

And he goes on to cite a good many instances. He regards that as enormously important. He says:

The care which the American soldier received in World War II was better than any soldiers had ever before received. It was a combination of many factors: the prompt performance of competent surgery as soon after wounding as possible; the application of medical care within a framework of specialization; the safe and speedy evacuation of the wounded; the ready and judicious use of

plasma and blood transfusion; the availability and wide employment of effective chemotherapeutic agents. The results of this professional care, in terms of lives saved and men returned to useful ways of life, are very well known. It is not so well known that these results did not just happen, that they are attributable to careful planning, based on accurate scientific principles, which in many instances were themselves based on observations made in animal experimentation.

The mortality and morbidity rates of many special conditions in World War II were greatly reduced over the rates obtained in the last war, and sometimes over the rates obtained in civilian practice.

Then he cites the advances made in shock, which has advanced, as Dr. Blalock has indicated, in experimental work in which the dog was the chief animal that served.

Many first-aid measures were based on these animal experiments [reading]:

During World War II the administration of plasma as a first-aid was the first treatment given to shocked soldiers to prepare them for operation. But plasma was not enough; it was merely first aid. As soon as the patient could be removed to an environment which permitted more elaborate measures, whole blood was given.

As the result of those two measures surgery could be attempted, and carried out successfully, which could not have been considered without them. But again the administration of plasma and of blood had been studied under controlled conditions, in animal experiments.

This fibering film that was used to aid in the healing of wounds was the result of animal experimentation. The healing of wounds and the better care of wounds is based on experimental work of this kind.

Then there is a whole series of work in preventive medicine from the use of biologics that must be tested on animals, the development of drugs must be used for both treatment and prevention of disease, which is largely again the result of not only fundamental work on animals but the control constantly exercised through the use of animals.

Then we in Preventive Medicine in the Surgeon General's office are proud of the way in which the soldiers have been fed in this war, and we can show in the development of nutrition, the ration for the Army, the feeding of the soldier, as well as some of the results for animals, that have resulted from animal experimentation.

The experiment on pellagra by the use of nicotine was the result of experimentation on animals.

I will read:

In this enlightened age it would scarcely seem that any defense of animal experimentation would be needed. If, however, it should be, it is supplied by the thousands of American soldiers alive today who otherwise might have died.

Mr. BATES. Just a minute, Doctor. There are two questions I think the committee would be interested to hear about at this time.

We hear about animals being anesthetized, as you call it, and, to your knowledge, as former dean of Yale Medical School, as well as from your experience in the field of medicine and surgery, what have you to say about any brutal treatment of dogs, painful reactions, or anything along that line that seem to be the claim of the proponents of this bill?

General BAYNE-JONES. At Yale, as well as previously at Rochester, we had a series of rules that are posted for laboratories and used for the guidance of people. I presume every medical school observes them.

That has to do with the care of these animals, the anesthetizing of these animals and their proper care after operation.

They are naturally uncomfortable after operation. Everything is done, in my opinion, to reduce pain.

I have not seen any of these operations undertaken frivolously. There has been a very serious purpose in the background of all of them, and every effort has been made to reduce pain and discomfort to the animal.

Mr. BATES. So that the reaction in the case of animals would be the same as in the case of human beings after operation, I presume.

General BAYNE-JONES. In my opinion, that is so.

Mr. BATES. Now, the second question: Have we resorted to any use of human beings, such as prisoners, at any time in history, to advance the cause of surgery or medicine? Or have you ever heard where prisoners have offered themselves as guinea pigs, so to speak? Do you recall any such instances?

General BAYNE-JONES. I do not know of any operations on human beings on that basis. In medical schools I suppose every dean has had the experience of receiving letters from human beings who want, for compensation, to submit themselves for operation.

At Yale we never accepted such a responsibility.

In this war, and you have read about it in the papers, human beings have been used as volunteers for experimental work in the development of drugs and for diseases that animals are not susceptible to.

Mr. BATES. That is all I had in mind.

General BAYNE-JONES. Those have been of two groups. The conscientious objectors or the religious objectors have had an extraordinary attitude toward that sort of thing. These men have volunteered to willingly submit to studies of the causes of some diseases, on immunization procedures to build up vaccines, and the testing of drugs.

In addition, some of the prisoners at some of the prisons in the country have similarly volunteered, and these are volunteers on an individual basis. The man considers the situation, he signs a statement of his voluntary action, and they have contributed a great deal to the advances in this war.

Mr. BATES. Even doctors have contributed, I presume, too, in experimenting on themselves through the year.

General BAYNE-JONES. Doctors have done that. I have known of some, and of course I know of some who have accidentally become volunteers in the course of their work. They have come down with what they were working on.

Mr. BATES. Any questions? All right, General, thank you.

Dr. FISHBACK. The committee through Mr. McGehee asked Admiral Ross McIntire to appear. He is on the west coast. But I have a letter from Admiral Agnew which is pertinent, which I would like to put in the record.

(The letter referred to follows.)

NAVY DEPARTMENT,
BUREAU OF MEDICINE AND SURGERY,
Washington 25, D. C., February 20, 1946.

Dr. FREDERICK C. FISHBACK
Washington D. C.

DEAR DR. FISHBACK, I received your telephone message asking if the Navy desired to be among those testifying at a public hearing in the House on the Lemke bill on February 28.

Inasmuch as the Navy is not immediately and directly affected by the provisions of the bill, it seems not appropriate that a representative should testify unless

invited to appear by a member of the House subcommittee holding the hearing. It is therefore our intention only to send an "observer."

I enclose, however, a letter evoked in like cause which you may present in evidence should you so desire; and, if officially invited, this Bureau will designate an officer to express its views.

Wishing you success in your task, I am,

Sincerely yours,

W. J. C. AGNEW,
Read Admiral (MC) USN,
Acting Chief of Bureau.

JANUARY 7, 1946.

Mr. DWIGHT ANDERSON,

Executive Secretary, Medical Society, State of New York,
New York 17, N. Y.

DEAR MR. ANDERSON: I have your letter of January 2 informing me of the expected introduction in the New York State Legislature of a bill forbidding the utilization of dogs in medical research.

It is unfortunate that ungrounded statements regarding mistreatment of dogs have created in the minds of many well-meaning persons erroneous beliefs, and thus enlisted support for legislation the effect of which is to hamper medical progress; for dogs have been of inestimable value in discovering means of preventing and treating various diseases of men and of the animals themselves.

I have in mind not so much earlier studies on insulin therapy, anemia, resuscitation, shock, and hemorrhage, as more recent investigations dealing with helminthiasis, schistosomiasis, virus infections, gas poisoning, and nutrition—studies which to my certain knowledge have contributed significantly to the health of our military personnel and their ability to survive the varied hazards of a war.

Although the Medical Department of the Navy is obviously not constrained by the proposed legislation, I regard it an obligation in the interest of public health and welfare to give expression to my convictions, and to permit you to use this communication in your educational program.

Sincerely yours,

ROSS T McINTIRE,
Vice Admiral (MC),
Surgeon General, United States Navy.

Dr. FISHBACK. Capt. E. G. Hakaneson is commander of the Naval Research Institute at Bethesda.

Dr. Hakaneson.

STATEMENT OF CAPT. E. G. HAKANESON, COMMANDER, NAVAL RESEARCH INSTITUTE, BETHESDA, MD., REPRESENTING ADMIRAL ROSS T. McINTIRE, SURGEON GENERAL, UNITED STATES NAVY

Captain HAKANESON. Mr. Chairman, I have in mind to limit my remarks to a few examples within my own limited experience in war-time research in which dogs participated.

You remember that during the early days of the war in the South Pacific malaria threatened the life and health of our men and even the success of some military operations. The antimalaria drugs available left much to be desired. Specifically, there were not any better remedies for the disease which affects the brain causing a rapidly developing unconsciousness and death unless prompt treatment is given.

A study was undertaken to determine whether or not some newer drugs being investigated under the sponsorship of the National Research Council could be used intravenously with less danger and more effectively than quinine and atabrine which were the drugs available.

A series of dogs first participated in the study in order to determine approximately the dose suitable for man. Following this it was possible for the scientist and his co-workers to subject himself to intravenous solutions in doses calculated to be approximately correct through observation in the work on the dogs.

It was determined that this drug could be given to man intravenously with less danger than quinine and atabrine. Without animals this research could not have been made.

During the war submarines and other ships on patrols were without medical officers aboard. The possibility that members of the crew would develop appendicitis was frequently a worry to the commanding officer who had the responsibility of caring for the officers and men. Fortunately relatively few cases of appendicitis and peritonitis were recorded from these ships. But you will recall that on one occasion an officer undertook an appendectomy on a submarine in desperation rather than see his shipmate die. Remarkably, the patient recovered. An appendectomy given by a man who has never opened an abdomen before is an extremely hazardous procedure. Penicillin became a safeguard against subsequent peritonitis to at least delay complications until the assistance of a surgeon became available.

A controlled study was carried out on dogs and experimentation showed penicillin in large doses would prevent peritonitis. It was known that the blood supply of a dog's appendix resembles closely that of the human.

A third example—or rather, I should just say, that as a result of this study it was deemed appropriate to issue penicillin to submarines and other ships on patrol and to isolated stations where no medical officer was available.

The knowledge that penicillin was available for this purpose even if it did not have to be resorted to, must have been a relief to the commanding officers and others who carried the responsibility for the welfare of his men.

Then a third example.

Many of our wounded men evacuated to our hospitals had shell fragments imbedded in their muscles and tissues. Many of these men were in need of physiotherapy, including diathermy. The question arose whether diathermy could be used as it might heat the metals and injure contiguous tissues.

For this purpose dogs were used. These are only three contributions by the dogs in wartime research. If the whole story were known it perhaps would be fitting to pay tribute not only to the canine in the fox-holes but to the friendly cooperative research dogs on the home front.

Mr. BATES. Thank you, Doctor.

Dr. FISHBACK. The next speaker is Dr. Frederick Brady from the Division of Zoology, the National Institute of Health.

Dr. Brady.

STATEMENT OF DR. FREDERICK J. BRADY, DIVISION OF ZOOLOGY, NATIONAL INSTITUTE OF HEALTH

Dr. BRADY. Mr. Chairman and members of the committee:

I am Frederick J. Brady, graduate of the University Medical School, 1931. I have held a commission in the Army Medical Corps and am now commissioned in the United States Public Health Service.

I have been engaged in research work since 1937.

I would like to say a few words on tropical diseases.

The first disease was known as filariasis. This disease was acquired by some of the members of the armed service because of the exigences of the armed service.

It has a complication known as elephantiasis.

Elephantiasis is a very nasty thing, in that it produces lesions.

When it was known our troops had acquired filariasis immediate steps were taken. Fortunately, in the Pacific, these steps could be taken. But we wanted to know—there was no treatment known—what of these cases coming back to this country—we knew that we had a mosquito throughout the South which was an excellent vector of that disease.

Would the disease be established in this country?

The question came up to what laboratory animal to be used in experiments on this disease. There was only one animal that has a parasite related to the human parasite and that animal was the dog. The dog harbors a parasite known as the heart-worm which is a relative of the human parasite.

I am wondering in a situation of this sort what the Anti-Vivisection Society would have us do. Here we have thousands of veterans with a serious disease for which no treatment is known. We have in the laboratory but one animal with which we can work.

Of course, to us the answer is obvious that the dog is the animal of choice, and that the dog should be used in this experimental work.

The rest of the story is a very happy one. The veterans will not develop any of these deformities shown in these pictures [indicating].

Furthermore, as a result of the dog experimental work two compounds have been found which appear to be very excellent in the treatment of this disease. As a result of the experiment we now have treatment methods which control.

One other method—

Mr. HARRIS. I hope you do not object to interruptions here.

Dr. BRADY. No.

Mr. HARRIS. Did we have a great many of our boys contract this disease?

Dr. BRADY. Yes, sir. I do not know whether the figure is public. It is in the files of the Army and Navy. I would say it runs into the thousands. Further than that I would prefer not to say.

Mr. HARRIS. Did we lose a lot of them before this compound?

Dr. BRADY. It does not cause death. It causes deformity. It is not a fatal disease.

Mr. HARRIS. A lot of these boys have been brought back and with this compound have been cured?

Dr. BRADY. In these boys it has not been necessary to use this compound yet, but we do have it in reserve.

As I say, the mosquito is all throughout the South. If we get a nucleus of these infected boys that have this disease in their blood it could sweep through an area. It is part of our duty to see that a disease does not get hold in this country.

So we are fortunate to have these two compounds now.

Mr. HARRIS. Such a disease is prevalent in the tropical area. It does not mean it could not become prevalent in this country?

Dr. BRADY. Yes. We know it can be established here.

Mr. BATES. Where is the line of distinction between filariasis and elephantiasis?

Dr. BRADY. It is a complication.

Mr. BATES. Would the remedies that you have already discovered apply to these natives in the Pacific area?

Dr. BRADY. Presumably now we have methods to control this disease in native populations.

Mr. BATES. Has the Navy, Doctor, developed any plan in the Pacific areas for the treatment of filariasis or elephantiasis? I just came back from that area and I did not observe any cases out there, but I presume there are some there.

Captain HAKANESON. Yes; during the war we had a number of those cases, and it very quickly established the most efficient vector, the mosquito, its habits, which made it possible to put into effect, and that disease is now under control by effective preventive control.

Mr. BATES. And whatever remedies we have I presume are made available to natives who are afflicted in this sense.

Captain HAKANESON. Yes.

Mr. BATES. That is all. Go ahead.

Dr. BRADY. I might add that the reason this should be made effective was because troops were quartered nearby.

The range of the mosquito is short. In this territory that could not be done. I mean, should it be in our own population, we could not take infected individuals and say "You have to live out in another colony."

Mr. BATES. Then as the result of experimentation on dogs you have discovered a treatment?

Dr. BRADY. I have not discovered it. It has been discovered by other workers in this country.

Mr. BATES. By experimentation on dogs?

Dr. BRADY. Yes.

Mr. BATES. And it has proved effective?

Dr. BRADY. Effective.

Mr. BATES. And valuable in controlling the disease?

Dr. BRADY. Yes.

Mr. BATES. And in curing?

Dr. BRADY. Yes.

Another disease is called schistomyiasis. This is contracted by bathing in infected water.

These worms penetrate the skin. In Leyte where our troops landed this disease was epidemic.

Of course it follows that the infantry in combat through streams would acquire the disease, the engineers in building bridges would acquire the disease. It is not as deforming as the other diseases but it causes permanent damage to the liver or the bladder.

The damage goes on for years, it becomes worse, and these people ultimately die a horrible death.

That is, the disease of the natives. Do not understand the troops have it that badly. But again for the record I have a picture of this disease [indicating].

This [indicating] is a moderately advanced case and I think we could anticipate that that case would go on to death in a matter of a few years.

Mr. BATES. Did our own boys acquire these diseases, too?

Dr. BRADY. Yes.

Mr. BATES. In considerable numbers?

Dr. BRADY. Yes, sir.

Mr. BATES. Have you been able to get them in time?

Dr. BRADY. Yes, sir.

Mr. BATES. And how did you acquire the remedy?

Dr. BRADY. I will go on with this—

Mr. BATES. Oh, all right.

Dr. BRADY. The problems here were protection of the troops against further acquisition of the disease, improvement in our methods of treatment, and, thirdly, methods to keep the disease from being established in this country.

Now, here again we used dogs for some of the experimental work.

The life cycle of this parasite is a very complicated one. It was necessary to have an animal which would harbor a certain form of the disease, and that animal had to be a mammal.

It was found that dogs in the Leyte area of the Philippines were already infected with this disease and the Army, through the efforts of Dr. Bayne-Jones to a great extent, deemed this problem should be given a high priority, and the Army shipped these dogs for use in this work.

These dogs were used primarily for experiments to determine whether the disease could be established in this country. As I said before, dogs were quite necessary in that work.

Other experiments were undertaken on the treatment of the disease.

First, we injected dogs with a compound that is found to be fairly good in this disease, and we felt if the treatment were to be improved other treatments should be known.

A compound was developed from the radio-active film (?), which was put in the atom-smasher out at Carnegie Institute and then bombarded, so that we could measure the amount of antimony, not that it had any therapeutic value.

We were able then to measure the blood concentration of this compound.

And I show the concentration in terms of hours [indicating].

We repeated this process with white rats, and I would like to submit curves showing what happens to this compound in the blood of white rats.

Others have said there are other animals much like dogs and why should we use dogs? You will see those curves are quite different [indicating].

The next step was to use the drug in man. So in that we got this curve [indicating], which was almost identical with the curve in dogs [indicating].

I might say in closing that from all of these works all benefited and, oddly enough, even the antivivisectionists have benefited. We are looking forward to the control of these diseases in this country, and dogs have been necessary in these experiments.

Mr. BATES. Thank you, Dr. Brady.

Dr. FISHBACK. My next witness is Dr. Willard H. Wright. He is going to talk on the benefits to dogs.

STATEMENT OF DR. WILLARD H. WRIGHT, CHIEF, ZOOLOGY
LABORATORY, NATIONAL INSTITUTE OF HEALTH

MR. WRIGHT. Mr. Chairman and gentlemen of the committee, my name is Willard H. Wright. I have degrees in doctor of veterinary medicine, master of science, and doctor of science in medical zoology.

I am teacher of the National Institute of Health, of the Zoology Laboratory, National Institute of Health.

Dr. Brady has explained some of the experiments which he conducted in the treatment of human filariasis and mentioned the fact that one of the animals used in those experiments was the dog infected with the heart worm, so-called.

Now, I want to say a few words in connection with the experimental work on the dog which has reacted not only for the benefit of man but has reacted also to the benefit of the dog.

I think often in hearings of this sort we overlook the fact that in this type of work the dog also benefits.

Mr. Chairman, I would like to show you a heart containing these worms, and also a bottle of 62 worms taken from the heart of a single dog [indicating].

When I was in the Bureau of Animal Industry in Washington in 1930 I was given a job of finding some treatment for this parasite.

Now, these worms are about 8 to 12 inches in length. They occur in the right ventricle, one of the chambers of the right side of the heart. They frequently occur in considerable numbers. It is not uncommon to find a hundred or more in the heart of a single animal. And naturally they result in considerable disturbance to the health of the animal.

These dogs tire very easily, they have difficulty in breathing, they have chronic heart lesions that hinder their usefulness; and very frequently when the infection is severe they finally succumb to it.

Now, in cooperation with Dr. Paul C. Underwood we worked for 4 years on the treatment of this condition, and not only did we have Federal funds but we had funds supplied by a group of disinterested—or interested dog owners, whom I might say were not antivivisectionists but who supplied the sum of \$2,500 to aid in this particular project.

Not only did they give money but they gave some of their valuable bird dogs as experimental animals so that we could test drugs on these dogs.

As a result of this work Dr. Underwood and I developed a treatment which we thought was successful. This drug has a common name of fluidi (?). It was produced by the German Dye Trust and was used in Egypt originally in the treatment of schistomiasis of which Dr. Brady just told you.

And after it came out I sent out questionnaires to veterinaries all over the South in an effort to ascertain whether the drug actually worked in practice. The replies we received from these men indicated that they treated a total of 1,000 dogs infected with the parasite, and that of the total of 1,000 animals 83.5 percent had been cured.

Now, my point is, gentlemen, that this work done on the dog in a relatively few animals, less than 100 dogs, has resulted in great benefit to dogs everywhere, not only in this country, in the United States, but all over the world. This treatment has had widespread appli-

cation, it has been used in a great many countries, and if it had not been developed, these dogs would still be suffering from this very dangerous parasite.

Now, just before this work was started in 1930 a similar bill was introduced in the House of Representatives.

Now, at that time one of the officials of the Antivivisectionist League stated in the hearings on that bill that she would not permit experiments on a few dogs to attempt to find a cure for heart-worm infection even though it might benefit enumerable other dogs.

Now, gentlemen, this is not the only example I might give you of where a relatively small amount of experimental work on a relatively small number of dogs has resulted in great benefit not only to the human patient but to dogs in general.

I worked for a number of years under Dr. Morris C. Hall who has appeared here many times in the past against bills of this sort. Now, as you all know, Dr. Hall developed two treatments for the cure of hookworm disease in man. One of these was carbon tetrachloride, which is no longer used, and the other was tetrachlorethylene, which is still used all over the world and has been used in thousands and thousands of cases of hookworm disease in man.

Now, that drug was developed entirely by experimental work on dogs, and it is still the standard treatment for hookworm disease in dogs.

Perhaps some of you read a good many years ago Dr. Lambert's book called *A Yankee Doctor in Paradise*.

Dr. Lambert says of Dr. Hall this, and I should like to quote his remarks:

Dr. Hale is dead now. I know it is trite to say that such men do not really die. He has put his own spark in men and women who would today be in their graves were it not for what he gave. He was of untold benefit to the human race because he had the opportunity here in Washington of carrying out experiments on a limited number of dogs, which not only benefited thousands and thousands of humans but also benefited thousands and thousands of dogs.

That is my point, Mr. Chairman, that if we prohibit the use of dogs in experimental work, we are not only reacting in the way of preventing the human family from getting benefit from this type of work, we are also equally preventing the dog from getting similar benefits.

Mr. McGEHEE. Any questions? Who is next?

Dr. FISHBACH. Dr. Benjamin Schwartz of the Department of Agriculture is going to speak very briefly.

STATEMENT OF DR. BENJAMIN SCHWARTZ, CHIEF, DIVISION OF ZOOLOGY, BUREAU OF ANIMAL INDUSTRY, DEPARTMENT OF AGRICULTURE

Dr. SCHWARTZ. About 25 years ago parasitologists in the Bureau of Animal Industry, United States Department of Agriculture, experimented with dogs to discover an effective treatment for the removal of hookworms from these animals. The chemicals, namely carbon tetrachloride and tetrachlorethylene, were found to be highly effective for this purpose. These chemicals, moreover, were found in subsequent investigations to have great value in removing from farm animals some of the most debilitating parasites that affect them.

For more than two decades carbon tetrachloride, in dose of 1 cubic centimeter, has been the standard treatment for the cure of fascioliasis or liver fluke disease in sheep. This disease, which is often fatal to sheep, is common in flocks in the Gulf Coast, Rocky Mountain, and Pacific Coast States. Without carbon tetrachloride therapy many sheep that now reach livestock markets would have died on the farm or range, and many more would have been so severely devitalized by liver flukes as to be unmarketable.

Another serious parasitic malady of sheep, as well as cattle and goats, is verminous gastroenteritis, caused by small, thread-like parasitic worms that occur in the digestive tract of these farm animals. Tetrachlorethylene, the second drug discovered as a result of experimentation with dogs, has for years been a common treatment for the removal of these livestock parasites. In the South and other parts of the country having a warm and moist climate, the parasites mentioned constitute a limiting factor in the production of cattle, sheep, and goats. Aside from death losses, which are especially common in sheep, the parasites mentioned produce considerable morbidity in the animals named. Farmers, stockmen, and veterinarians have used tetrachlorethylene to good advantage in protecting the health of herds and flocks.

The dog plays an important role in the transmission of tapeworms to cattle, sheep, goats, and swine. Some of the parasites so transmitted are the cause of condemnations of affected edible portions of carcasses and of entire carcasses which come under the scrutiny of Federal, State, or municipal meat inspectors. The knowledge of the mode of transmission of these parasites from dogs to livestock and vice versa was gained through experimentation with dogs. The knowledge so gained lead, moreover, to the formulation of control measures based on freeing dogs of tapeworms by medication and thereby arresting the vicious cycle of the parasites. Effective medication of dogs for the removal of tapeworms also resulted from patient and painstaking experimentation.

Dogs are subject to diseases and parasites for which no treatment or control measures have yet been developed. Red or follicular mange is a very serious and sometimes fatal skin disease of dogs for which rational therapy is not known; in fact, much still remains to be discovered concerning the mode of transmission of this disease. Coccidiosis is another serious disease of dogs, especially of puppies, for which specific medication is unavailable. The development of an effective cure for heartworm disease of dogs is still a subject of investigation. The solution of the problems mentioned would be not only of benefit to the dog, but would pave the way for the cure or control of parasitic diseases of livestock that are closely related to the canine diseases named.

Continued experimentation with dogs to develop medical treatments and to arrest transmission to livestock of canine parasites must go on for the benefit of the dog and in the interest of protecting and conserving one of our greatest national assets, the livestock industry.

Mr. BATES. Doctor, compared with, let us say, the after-operation effects on dogs who have not been anesthetized, of course, there is no way of telling from dumb animals how much suffering actually takes place where a disease is existing within the animal, or how long that suffering and pain that may accompany that disease may last.

So that there must be some offsetting values to the saving of that distress for live animals who may be diseased, by finding a cure, even though the dog may have what we call a postoperational feeling in the form of pain.

There is no way of telling just how many animals suffer pain as the result of the inability to find a cure for the diseases which are existing in those animals?

Dr. SCHWARTZ. No; there is no way.

Mr. BATES. They cannot speak for themselves. A human being can. But on the other hand, if we found no solution for many of the physical difficulties that affect the human race, certainly there would be continuous pain and eventual death, even at an early age.

Dr. SCHWARTZ. Yes.

Mr. BATES. That you might have in those three children we saw here this morning, if a dog did not contribute to the solution of the problem; even though there were some postoperational pains.

It is a relative question whether we should just permit the human race to suffer it out and experiment on them, or, experiment on animals in the hands of skilled surgeons.

They are all anesthetized, I understand.

Dr. SCHWARTZ. In these particular experiments no operations were involved. It was simply giving medication. There was no need for any anesthesia, there was no pain of any kind connected with this investigation.

Mr. McGEHEE. Any other questions?

Dr. FISHBACK. Mr. Chairman, I am going to hurry the three remaining witnesses.

The next witness is Father David McCauley, dean of Georgetown University School of Medicine.

STATEMENT OF REV. DAVID V. McCAULEY, DEAN, GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE

Reverend McCAULEY. I have been associated with the School of Medicine in Georgetown for the 12 years. Prior to that time I was engaged in the teaching of the biological and psychological sciences.

I will try to save your time and mine by merely reading this statement.

I feel compelled to begin my statement in this hearing with an apology for the repetitious nature of my testimony. It will be my endeavor to discuss briefly the moral aspects of vivisection and if I merely repeat what I have said at hearings on bills similar to the currently proposed legislation I trust that you will understand that the necessity for reiteration arises from the immutable nature of the fundamental principles of morality.

That a moral problem is involved in this matter of animal vivisection is deduced from the arguments of the advocates of this bill and from the penalty which, if enacted into the law of the land, the bill would impose upon those guilty of its violation. All of us are most grateful that up to the present time it has not been our custom to write into our laws enactments which would penalize by fine or imprisonment or both persons who are innocent of wrongdoing. And yet if we view this problem in the light of the fundamental principles

of ethics we are compelled to conclude that such would be the effect of the introduction of this antivivisection bill into our statutes.

The differences of vital manifestations in an ascending order in plants, animals, and human beings, establish an essential hierarchy among all living creatures. In this hierarchy we find that the Creator has granted man dominion over all other earthly creatures in order that they may serve and assist man in the prosecution of the end and purpose of man's existence. This dominion certainly embraces the God-given right to use all creatures for any lawful purpose he may desire. Please do not confuse my use of the word "lawful" with what is ordinarily meant by the term "legal." I am using the word in its strictly ethical sense and when I say that man may use creatures for any lawful purpose I mean that he may employ them in any manner in which he violates no obligation toward God, toward himself, or toward his fellowmen.

What is the purpose of the medical investigator in experimenting upon animals? The ultimate objective is to obtain knowledge which will alleviate, if not eradicate, some human and animal suffering and disease. Can a man who is striving to attain such an objective be charged with violation of an obligation toward God or himself or his fellowman?

I have said at similar hearings and I now repeat that it is not surprising that no proof that the medical investigator's operation on a dog is evil has been offered by the advocates of antivivisection laws because if we adhere to the common principles of ethics none can be advanced. The most elementary course in ethics sets down three determinants for the morality or immorality of any action, the act itself, the purpose of the agent and attendant circumstances which intrinsically affect the act or the purpose of the agent. In the case under consideration the act is an operation on a dog. In the ethical order an operation is either morally good or morally indifferent in its very essence. If it were ever intrinsically morally evil no surgeon could be permitted to perform any operation on an animal or human being. The purpose of the agent in this case is the acquisition of knowledge which will benefit animals and men and therefore cannot be considered morally wrong. Finally what are the attendant circumstances which intrinsically affect the action and the purpose of the agent in this situation? The subject is a dog. The operator is an intelligent, skilled scientific investigator whose success depends upon taking every precaution in this work that would be prescribed for the most exacting surgical operation on a human subject. His appreciation of psychobiological relationships compels him to understand that the infliction of unnecessary pain will nullify his investigation just as readily as poor technique and consequently his anaesthetist must be able and cannot exercise too much care. Failure is bound to be his lot if he does not guard his subject against infection and hence his laboratory, his instruments, his equipment must be as aseptic as will be found in the operating rooms of our best hospitals. It is difficult to perceive how any person can regard these circumstances as evil in themselves or as intrinsically affecting the operation or the purpose of the investigator in such a way as to make either morally evil.

Finally and frankly, I must confess that there is one aspect of this bill which is both morally and scientifically confusing. The same proposal which if enacted will penalize and brand as a malefactor a scien-

tific investigator who will dare to operate upon a dog in an effort to lighten or eliminate human and animal pain and disease, the very same bill will permit operations on a dog "for the convenience of the owner." Is it a crime to be inspired with a lofty motive? Or is the convenience of the owner to be regarded as a more valuable consideration than alleviation of human illness? Answer these questions in the manner in which your own intelligence will permit and one fact will still remain intact and that is that as long as the advocates of this bill will permit dogs to be operated upon for the convenience of their owners, even they can logically discover no intrinsic, moral evil in animal vivisection undertaken in a scientific manner for the advancement of true science and the betterment of this world of ours.

Mr. McGEHEE. Any questions?

Dr. FISHBACK. Mr. Chairman, one more brief witness, Dr. Joseph Wall, representing the Medical Society of the District of Columbia.

STATEMENT OF DR. JOSEPH WALL, REPRESENTING THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

Dr. WALL. Mr. Chairman, my name is Joseph S. Wall. In regard to qualifications, I am a physician and many years professor of physiology and professor in diseases of children in Georgetown Medical School, and, many years connected with Washington hospitals on medical staff, chairman of the committee on public policy, for which I now speak.

The medical society unanimously opposes the passing of this legislation, and does not believe the citizens of Washington should be deprived of the benefits that accrue to science, as Dr. Blalock has pointed out to you.

And I might say on behalf of the hospital that as our hospital receives these little blue baby children they are born in the condition Dr. Blalock told you. We are the first to receive them, and we should have properly trained surgeons to give this benefit to them that he has described to you.

He did not tell you of another instance where in our hospitals a number of patients have been given absolute relief and cure.

I will say that this operation was backed up by experimental work on dogs, and this one of equal importance with those Dr. Blalock has shown you.

Mr. McGEHEE. Any questions?

Dr. FISHBACK. My last witness is a representative of the Health Department of Washington, D. C., and he has a very short statement. Dr. Cumming. Dr. Ruhland is at another meeting.

STATEMENT OF DR. JAMES G. CUMMING, CHIEF, BUREAU OF PREVENTABLE DISEASES, OFFICE OF THE HEALTH DEPARTMENT, GOVERNMENT OF THE DISTRICT OF COLUMBIA

Dr. CUMMING. My name is James G. Cumming, director, Bureau of Preventable Diseases.

Dr. Ruhland is at a Budget hearing and cannot be here.

The proposed legislation prohibiting experiments on dogs in the District of Columbia is opposed by the District Health Department for the following reasons:

The enactment of local legislation forbidding the use of dogs for experimental purposes will block research that would deny the people of the District of Columbia additional life-saving benefits.

The District of Columbia has gained in the saving of lives because of advances made possible through experiments on dogs. Two examples are cited: Since the discovery of insulin made possible through experiments on dogs, the diabetes mortality rate in the District of Columbia for persons under 40 years of age has dropped 79.2 percent. Also since the introduction of the liver treatment for pernicious anemia the death rate from this disease in the District of Columbia has been lowered 89 percent.

These figures are from the Bureau of Vital Statistics of the District of Columbia Health Department.

Claims of cruelty and gross use of dogs for research are not true in the District of Columbia. Dogs are not extensively used at present in the District for experimental purposes and there is no local evidence of cruelty to dogs.

There are no dealers in the District of Columbia who are engaged in the business of collecting and selling dogs to institutions for research work.

The District prohibits the sale of dogs from the District pound to institutions for scientific purposes.

Finally, it is inconceivable in this day that the people of the District would wish to shackle responsible medical hands whose chief concern is in advancing health protective techniques and life-lengthening measures.

The District of Columbia Health Department therefore recommends that the subcommittee act unfavorably on this bill.

I would also like to read a letter from the Capital Dog Training Club. [Reading:]

At the last meeting of the Capital Dog Training Club of Washington, D. C., the subject of vivisection was brought up and discussed, and by unanimous vote the club went on record as opposing the Lemke bill which would restrict vivisection, and to cast what weight its opinion might have in favor of continuing animal experimentation.

Members of the club all realize the great contribution to alleviation to both human and animal suffering that animal experimentation has produced. They felt that perhaps such an expression of opinion, coming from a lay group acknowledgedly interested in the welfare of dogs, might be of some benefit in defeating this bill. You are free to use this letter in any way that seems fit to you, and should you desire it, we will be glad to send a representative to testify.

Thank you for your consideration in this matter. I remain, very sincerely yours, William D. Claudy, M. D., for the Capital Dog Training Club.

That represents several thousand individuals who own dogs and engage in the training of them in the District.

Mr. McGEHEE. Any questions?

Mr. BATES. Doctor, Do you know of any dogs that have been used for experimental purposes in laboratories who have not been given an anesthetic?

Dr. CUMMING. I have never known of a dog to undergo it without an anesthetic; hypodermic syringe perhaps, the same as a human being.

I have operated on many hundreds of animals myself and I have never operated on an animal without an anesthetic.

Mr. BATES. You are pretty sure that does not happen here in the District?

Dr. CUMMING. No. Not at all.

Mr. BATES. Dr. Fishback, what would you say about that?

Dr. FISHBACK. I know that is true at Georgetown.

Mr. BATES. What would you say about other medical schools?

Dr. FISHBACK. Well, my experience was at Harvard. No dogs were used by students but the experimental work that was done there always was under anesthetic.

My personal experience was at the experimental institute of the Mayo Clinic and every animal had an anesthesia given, I would say better to the dog in those days than to the average human being, because it was the type of anesthesia that Dr. Blalock used with these children.

Mr. BATES. That is the equivalent of giving them a general anesthetic?

Dr. FISHBACK. Oh, yes.

Mr. Chairman, we have presented our case and I want to thank you. We ran 3 minutes over our time. We ran 93 minutes, and I stipulated that I had no intention to enter into any rebuttal.

Mr. LEMKE. Mr. Collins.

STATEMENT OF DR. FREDERICK W. COLLINS, NEWARK 7, N. J.

Mr. McGEHEE. Will you give your name.

Dr. COLLINS. Dr. Frederick W. Collins, Newark, N. J.

Mr. McGEHEE. Are you a practicing physician?

Dr. COLLINS. Yes; I graduated from the School of Naturopathy and I graduated from the Philadelphia College of Medicine and Surgery; I graduated from the College of Osteopathy in Philadelphia; and I am licensed in Pennsylvania as an osteopathic physician and surgeon; I am registered there as a regular physician and surgeon under the old act of 1907. I am licensed in the State of New Jersey as a chiropractor; and I am licensed in the State of Connecticut as a naturopathic physician.

Mr. BATES. Doctor, so that we will get your background a little more, have you engaged in the practice of medicine or surgery?

Dr. COLLINS. Yes, sir. In the State of Pennsylvania.

Mr. BATES. Are any of the schools that you mentioned here, or are all of them accredited schools?

Dr. COLLINS. They are credited in their line of work.

Mr. BATES. Are they accredited by the medical profession?

Dr. COLLINS. Chiropractic is not accredited by the medical profession, and osteopathy is not accredited by the medical profession.

Mr. BATES. Are you a graduate of a medical school?

Dr. COLLINS. Yes, sir. The Philadelphia School of Medicine and Surgery. At the time I graduated it was an accredited school.

Mr. BATES. Is it still in existence?

Dr. COLLINS. No, sir. It went out of business, like a great many other medical schools.

Mr. BATES. So you have a license to practice medicine and surgery?

Dr. COLLINS. Yes, sir. In the State of Pennsylvania.

Mr. BATES. Not in Connecticut?

Dr. COLLINS. I am licensed there as a naturopathic physician.

Mr. BATES. What do you mean by that—naturopathic physician?

Dr. COLLINS. A naturopath is a man who believes in God and nature. He uses water and other things which we are taught in the Holy Bible to use.

Mr. BATES. You do not believe in the use of the knife?

Dr. COLLINS. I do not believe in the unnecessary use of the knife.

Mr. BATES. Do you recognize the knife as being necessary in a surgical operation?

Dr. COLLINS. Probably in 20 percent. Eighty percent of the surgical operations are not necessary.

Mr. BATES. What percent?

Dr. COLLINS. About eighty percent.

Mr. BATES. You find that out after you go in there. Is that it?

Dr. COLLINS. Yes.

Mr. BATES. But you have no way of telling before you go in?

Dr. COLLINS. That is right.

Mr. BATES. That is all, Doctor. Go ahead.

Dr. COLLINS. My talk takes about 22 minutes but I will cut it down to about 10. I have in my hand a booklet of affidavits concerning the atrocities and abuses of vivisection laboratories on dogs.

Mr. HARRIS. Where? In the District of Columbia?

Dr. COLLINS. No. This same thing happens in every State where vivisection is performed.

Mr. McGEHEE. Well, it should be confined to the District of Columbia, because this bill affects the District of Columbia.

But I will let you make a general statement.

Dr. COLLINS. Well, this is a general statement of vivisection as it happens all over.

Mr. McGEHEE. All right. Proceed.

Dr. COLLINS. The picture on the front page shows a man drowning and a dog jumping in to save him. In the upper left-hand corner there is a picture of a dog entitled "A silent Appeal." This dog's appeal is to the vivisector who is about to cut him up alive. This is vivisection.

Mr. HARRIS. Where is that?

Dr. COLLINS. I will give it to you right away.

In these affidavits the names of Dr. Carrel of the Rockefeller Institute, Dr. Simon Flexner and Dr. Noguchi, were mentioned.

One of these affidavits states that Dr. Flexner would point out a dryer that was supposed to be used to dry the dogs and asks if it is not a beautiful device, and wouldn't it be nice for drying hair? This dryer was never used on the dogs but only for appearance sake.

It is all in the affidavit here.

There are also affidavits regarding Dr. Meltzer and Dr. Opie. Dr. Meltzer during his experimentations would use blunt needles. They were so dull, the affidavit goes on to say, that he would have to force the needles in with his knees and the dogs would howl pitifully.

The affidavits also tell of experiments on lambs and some large St. Bernard dogs that were sent over to the Jersey farm, and it was intended to make over there the experiment of transplantation of paws. Some very queer doings are going on over there.

It is told in these affidavits how Dr. Noguchi was very fond of vivisectioning snakes, pigeons, birds, and monkeys; also cats, and an instance

is given where Dr. Ortschild placed five dogs on the tables, and each one shot, and the students were to probe for the bullets. The dogs that did not die on the tables were killed the next day.

One man tells in his affidavit—

Once when making my rounds to see if all the windows were closed I went into a room, and there I saw one of the most sorrowful sights I ever witnessed. A dog, which a student had left on the table for dead, was dragging itself over the floor with all the instruments hanging to it.

This same man tells us that—

Dr. Ortschild, when they had any animals to be killed, would kill them in the cheapest way he could; he would tie the dog to the table and take a hat pin and run it into its brain. One of the best butchers one would want to see work is Dr. Arthur Hersfelder, who ties the dogs on the table and starts to work before the dog is under the influence of the anesthetics, such as morphine or ether. Dr. McCallum, another of the doctors, would operate on dogs, and they would lie in convulsions for days at a time.

The affidavit of this man continues:

The worst of all sights was the bleeding of the horses. These horses were bled twice a month, and a gallon of blood taken from each animal; after the bleeding they would go to their stalls and lie down, being too weak to stand.

He also says:

Once in awhile we would get a visit from the SPCA of Baltimore; and you may be sure everything was in the best of condition when these gentlemen would arrive. The night before the people from the SPCA came, we had to work until 10 o'clock to get things cleaned up in good shape for them.

These affidavits are signed by the man there, William Blakeney, witnessed by Diana Belais and Clarence W. Senior.

STATE OF NEW YORK.

City and County of New York.

Sworn to before me this second day of March 1910, by William Blakeney.

CLARENCE W. SENIOR, *Notary Public.*

I believe that vivisection, the cutting up of live dogs, has never yet produced an atom of prevention or cure for cancer.

Vivisection of dogs has not yet been able to help one tuberculosis case.

Vivisection of dogs has not, with all of its experiments, been able to cure a hydrocele.

Vivisection has not, in all its history, been able to alleviate the pain and replace a procidentia.

Vivisection, with all of its horrors and tortures of animals, has never been able to discover the cause and cure of rheumatism.

Vivisection, with all of its tortures, has never been able to cure a case of nephritis.

Vivisection of dogs, with all its ghastly horrors, has never discovered anything that will help epilepsy.

Vivisection, with all of its painful agonies to dogs, has never been able to discover how to set a dislocated hip.

Vivisection, with all of its damnable mutilations of animals, has never been able to correct a dislocated cuboid bone.

Vivisection has never been able, in all of its years of brutality and beastly practices, to cure the common cold.

Vivisection, with all of its horrors, has not been able to discover how to cure a baby's diarrhea.

Vivisection, with all of its horrors, has not discovered one iota of truth or help in curing constipation.

Vivisection has never been able to discover anything through the cutting up of dogs that would cure sugar diabetes.

Vivisection, with all of its damnable practices, which harden the hearts of the vivisectors, has never been able to alleviate the pain of an enlarged prostate gland.

Vivisection, which is a diabolical infamy imposed upon loving, faithful and kind dogs, has never been able to cure a sinus congestion.

Vivisection has never been able to discover anything that would cure dermatitis.

Vivisection, in all of its gore, has never been able to discover anything that will relieve the congestion of hemorrhoidal veins, known as piles.

Vivisection, in all of its gore, has never been able to discover anything that will stop people from smoking stinking cigarettes which contain 28 poisonous elements, the deadliest of which is nicotine.

Vivisection, with its cutting up of faithful, trusting dogs; the pouring of hot lead down their throats and the transplanting of arteries, has never been able to effect a cure for migraine headache.

I have a few more things here I wish to state, and I wish to state that in this Woman's Home disease here—Women's Home Companion—did I make a mistake? Excuse me.

Mr. BATES. Is it a disease or Companion you are speaking about?

Dr. COLLINS. I am speaking about the Woman's Home Companion. Excuse me for making a mistake.

Mr. BATES. I just wanted to get the record straight. That was all.

Dr. COLLINS. Thank you, sir.

Let us declare war on these chronic diseases.

I say let us declare war on incompetent medical doctors.

There are lots of good medical doctors, and there are many incompetents, the same as we have in our work or in the lawyer's profession.

And here is where Dr. Perrott says there are 23,000,000 people sick every day in the United States, and he gives a list here, an appalling toll.

Why are these people sick when we have 145,000 licensed medical doctors and vivisectors in the United States who are supposed to cure diseases? And how are they going to cure diseases with the use of dogs?

Gentlemen, I thank you.

Mr. McGEHEE. Any questions?

Mr. BATES. One. Apparently you have indicted the whole medical profession because of their inability to find any cures for the things that you mention there.

Dr. COLLINS. I—

Mr. BATES. Wait awhile now. Just let me ask a question.

Dr. COLLINS. Yes, sir.

Mr. BATES. It is really a blanket indictment because of their inability to discover cures for many of the diseases of mankind.

Now, would you take issue with the evidence that was presented here by these eminent surgeons and physicians this morning that they have found remedies for the cure of many of these diseases which they have mentioned, including the difficulty those three youngsters were suffering from?

Dr. COLLINS. I take issue on general grounds that the mistakes made by medical doctors are all buried under the ground.

Mr. BATES. Well, you say you have a license to practice medicine.

Dr. COLLINS. Yes, sir.

Mr. BATES. Are there any under the ground that you have made mistakes on?

Dr. COLLINS. No, sir.

Mr. BATES. They are all above the ground?

Dr. COLLINS. No, not all above the ground, because I am 73 years young, and many of them die from long living.

Mr. BATES. Well, now, are you sure of that?

Dr. COLLINS. Well, I am sure that if a person does not live an upright life and think right something is going to happen to his physical body.

Mr. BATES. Well, we understand from your testimony that you do not give the medical profession, not only of this country or of the world, credit for finding any cures at all.

Dr. COLLINS. Oh, yes, I do.

Mr. BATES. Well, what are they?

Dr. COLLINS. I will say this, if a man has a bullet in his body the medical doctor can probe it and take it out.

Mr. BATES. Well, do you think that they were responsible through vivisection for the development of cures for smallpox and diphtheria?

Dr. COLLINS. No; I do not agree with them on that point.

Mr. BATES. What?

Dr. COLLINS. I do not agree with them on that point.

Mr. BATES. Do you take issue with the doctor from Johns Hopkins this morning that the cure of these three children that were presented to us in the hearing resulted from experimentation that was carried out on dogs?

Dr. COLLINS. Well, that is what he says. I do not know.

Mr. BATES. Well, you doubt it. Is that it?

Dr. COLLINS. I have my doubts; yes, sir.

Mr. BATES. Well, there is a living example of what happened right before us.

Dr. COLLINS. Well, I am a living example that doctors gave me up to die when I was 17 years old, and now I am 73.

Mr. BATES. Well, doctors admit that they make mistakes.

Dr. COLLINS. I cannot understand how we should have 23,000,000 people sick in the United States with all the vivisection that is going on.

Mr. BATES. Well, what do you think the answer is?

Dr. COLLINS. I do not know. I am trying to find out.

Mr. BATES. You are a medical doctor you say. Do you practice medicine and surgery anywhere in this country today?

Dr. COLLINS. No, sir.

Mr. BATES. Why?

Dr. COLLINS. Because it is uncertain.

Mr. BATES. It is uncertain?

Dr. COLLINS. In naturopathy we cure colds.

Mr. BATES. So you do not practice medicine and surgery because you would say it does not do any good?

Dr. COLLINS. I did not say it does not do any good. You are putting words in my mouth.

Mr. BATES. Well, why do you not practice it?

Dr. COLLINS. Because I believe in God and nature.

Mr. BATES. You do not believe it is necessary?

Dr. COLLINS. A great amount of this practice by doctors is not necessary.

Mr. BATES. Well, some might be necessary?

Dr. COLLINS. Some might be necessary; I do not know.

Mr. BATES. You are permitted to practice it?

Dr. COLLINS. Yes.

Mr. BATES. But you do not practice it?

Dr. COLLINS. No.

Mr. BATES. For the reason you do not consider it necessary?

Dr. COLLINS. Because I believe in God and nature.

Mr. BATES. Well, I heard that expression used by a man in my city in Massachusetts when we had many inches of snowfall. He said, "Let nature take its course." The same thing happened in the District a few weeks ago. Some of the officials of the District seemed to think it should take its course; nature put it there, let it get rid of it.

Well, that is all, Mr. Chairman.

STATEMENT OF DR. ARTHUR V. ALLEN, CHICAGO, ILL.

Mr. McGEHEE. Dr. Allen.

Dr. ALLEN. My name is Arthur V. Allen. I graduated in medicine in 1909 from the Chicago College of Medicine and Surgery, which is now a department of a university.

I was an inspector in post-graduate medicine at the school for 3 years. I was professor of medicine for 2 years. I was chief surgeon of a large company for many years, one of the largest companies in my section of the country.

In my capacity as chief surgeon I treated a great many employees of other companies, including General Electric Co.

My practice has been large. I have had over a hundred patients a day for over 25 years, which I believe will show that I have had a lot of practical experience.

I have 7 doctors assisting me, 7 nurses, and 5 office girls.

Mr. McGEHEE. Are you still practicing, Doctor?

Dr. ALLEN. I am still practicing about three-fourths of the time.

Mr. McGEHEE. Go ahead.

Dr. ALLEN. In Chicago, 30 North Michigan Avenue.

Mr. McGEHEE. Proceed, Doctor.

Dr. ALLEN. I should like to make a brief statement in favor of this bill, H. R. 5572.

In the first place, I wish to state that I do not want anything I have to say to be construed as being against the medical profession generally. I have perfect confidence in the rank and file of the profession, and wish to speak only against the practice of vivisection of dogs and the methods used to promote and continue this practice.

Vivisection has grown from a small beginning in which there was a serious quest to find out something, to a great business—one could almost call it an industry. Large sums of money are invested in it, and it provides jobs for many people. Thousands of needless experiments are performed, and repeated from time to time. I can conceive of an occasional problem they might wish to solve, but when they

ask for 10,000 dogs each year for one laboratory, it becomes fantastic.

Mr. McGEHEE. That is not in the District of Columbia?

Dr. ALLEN. No; that is in my own district, but I am giving it as an example.

I am opposed to vivisection for these reasons:

First, it is extremely cruel.

Second, very little is accomplished with reference to solving man's illnesses.

Third, in many cases it delays advancement of real medical science.

Fourth, its effect on moral fiber of young people.

Regarding cruelty, they say it is not cruel. In a hearing in Chicago, one professor said:

There is no cruelty in my laboratory. All the animals are given an anaesthetic before the experiment and allowed to die before coming out of it.

In a hearing before a House committee in 1939 and again in 1941, men high in the profession testified there was "no cruelty connected with vivisection." Having visited the laboratories myself and read of the experiments as described in the medical journals, I am amazed and bewildered by such testimony.

In contradiction of their contention in this respect, I should like to briefly describe a couple of experiments briefed from their own description and let you be the judge.

No. 1. Experiment producing peritonitis, described in the Journal of the American Medical Association, December 30, 1944. Appendices of 98 dogs were tied off but not removed. Allowed to rot in the abdomen producing a fulminating diffuse peritonitis, a distressing and extremely painful disease.

Those are my words.

While an anaesthetic could have been given for the operation, it would be impractical to keep them under several days and would have interfered with the evaluation of the results.

No cruelty here? Did you ever have acute appendicitis, or witness the effects of pain in acute appendicitis?

Number 2. Destruction of the blood by injecting a sclerosing solution into the veins, described in the Illinois Medical Journal, June 1944.

Dr. FISHBACK. Would you give that second one again?

Dr. ALLEN. Described in the Journal of the Illinois Medical Association in June 1944.

Sixteen dogs were used but for the sake of brevity, only one is described. The solution was injected once a week for 7 weeks, each time using a stronger solution.

I would like to say this solution destroys the blood.

The dog began to have symptoms after the first injection, getting worse each week till the seventh week she was found dead on the floor of her cage bleeding from the nose and mouth.

If any of you have experienced the headaches of anemia, the shortness of breath, that dreadful weakness, the dizziness, and the chilling after loss of blood, you can imagine what this poor dog suffered.

No cruelty? Please judge for yourself.

Now, about the claims made for this practice.

They claim nearly everything for vivisection, but when I look into the facts in the case, I am not thoroughly convinced. They remind me of when I was a boy and the old farmer was trying to teach me how to

play euchre. I told him I was very slow in knowing when to pick up a trick. He said "The way to do that is to claim every trick." He said "Then you only give up those they argue you out of."

It seems to me if this method of research was good, they should have, in several hundred years, found out something about our common diseases. Let's look at the record and see what they themselves think when they are not defending vivisection.

I will call your attention to a report by the committee appointed by the President a few months ago to inquire into the health of the Nation. I will quote from a summary of this report as follows:

Nearly all groups interested in the health problem, the Federal Security Agency, the Public Health Service, the Pepper committee, and numerous lay and professional groups, have arrived with remarkable agreement at the same conclusions about what is wrong. Stated in its simplest terms, they are—

the third is the one I wish to repeat—

Research has not yet made a real dent in the chronic diseases, now the principal causes of illness and death.

I hope you remember that last sentence:

Research has not yet made a real dent in the chronic diseases, now the principal causes of illness and death.

Now, gentlemen, this is not my verdict, but the verdict of the best brains in the country. I should like to ask what you think of a system that has been in operation for hundreds of years supposedly making discoveries about diseases, but has not made a dent in the diseases we are having? Can you reconcile this report with their claims? I cannot.

Mr. BATES. Pardon the interruption at that point.

Are you drawing a distinction between the principal illnesses of today? Would you want to go back to the principal illnesses of 50 years ago, 25 years ago, the treatment of peritonitis, diabetes, appendicitis, and so many others? Would you say the medical profession has not made a dent in those diseases, which were largely responsible for a large percentages of deaths years ago, scarlet fever, diphtheria, and so on?

Dr. ALLEN. This is their own verdict, not mine. I am reading it to you.

They claim to have learned much about cancer, heart-disease, and diabetes. According to the United States statistics they have not lowered the incidence or death rate of these diseases; the last figures I have on them are as follows:

Deaths per 100,000 population

	1900	1939
Cancer.....	63	117.8
Heart disease.....	132	214
Diabetes.....	9.7	25.6

It would appear from these figures, that if they have progressed greatly, the public has not enjoyed the benefits of the progress.

Now, I would like to remark about the defense of vivisection.

The defense of vivisection before legislative bodies seems to follow a pattern, and I have no doubt but that it will do the same in this case. The pattern as I see it is as follows:

1. Claim credit for everything.
2. Tell them there is no cruelty.
3. Bowl them over with a great mass of evidence.
4. Keep things controversial.
5. Ridicule everybody who dares oppose you. Call them sentimental fools, dumb-bells, ignoramuses, and idiots. This will intimidate many from taking sides.

With the above points in mind, I trust you will be able to evaluate their testimony. I would especially warn you to discount many of their dramatic exhibits since most of them are either not due to vivisection by any stretch of the imagination or could have been learned without vivisection. These exhibits are a part of a "super-duper" defense which experts on "mass psychology" have devised.

There has been within the last few years, a strong tendency to laboratory practice. I would call it the laboratory trend. The doctor rarely uses the thermometer, or the stethoscope, or takes the pulse of a patient. He does not even look at the tongue. We hardly need doctors any more, all we need is medical clerks. They could be taught in 6 months to send everyone to the laboratory, read the report, make the diagnosis, and outline the treatment.

And as soon as the public learns to use penicillin they will not need to even outline the treatment. Everyone can take the same treatment.

Possibly this trend accounts for so much vivisection. But I believe we should pay more attention to the patient. Let us stop so much vivisection and turn these great minds to people and their ills. Many things would have been learned sooner, had it not been that too many were busy with animals. Maybe we could have had penicillin for World War I. There are 185,000 doctors in this country and 25 percent of them are not practicing medicine. Let us get more of them to taking care of the sick.

We have work to do. Thousands of children are crippled with heart disease, rheumatism, and spastic paralysis. We have great institutions full of them. These are our responsibility. All these could have been prevented if these children had the proper care. People need more medical care than they are getting. I do not think any of us get enough medical care.

I ask you to stop this vivisection and put these brains to more pressing needs.

I believe the medical profession can do wonders in the next few years of they will get out of the ruts.

Children are more important than dogs, so I will ask you to stop so much attention to dogs, and do more for the people. If we can give everybody attention, there will be few cardiacs, mastoids, running ears, chronic deafness, bronchitis, and asthma. Let us stop the production of this great group of lifetime cripples. We will never do it unless we change the trend.

Now, I made a little experiment some time back and I think it might interest you to just hear a little bit about it.

I want to say it was not an experiment on a dog, it was on people. I wanted to see what the public's reaction would be to approaching them on the subject of vivisection.

Hard as it was, I went out on the street and solicited some members for the Anti-Vivisection Society, to see what they would say.

The first woman I approached said "I would rather have them experiment on dogs than on me."

Well, she had me pretty well stopped. I did not know what to say about that. Maybe I would too.

So I went along to the next one. I thought, the next one is not going to be smart enough to stump me like that, and I approached her and she said "I would rather have them experiment on dogs than on me." The same answer.

I went to another one and she was wheeling a baby buggy. She said "I would rather have them experiment on dogs than on my baby."

Well, I began to set down the answers, and I have a list of them here that they made, and I began to wonder where they got these answers. They must have gotten them somewhere. The only way I can figure it out must be, it must be propaganda.

So there is my answer to some of them that I figured out.

I have to have an answer to these people:

1. I would rather have them experiment on dogs than on me.

The answer is:

There is no need of experiment on either of you, since practically all treatment is standardized by previous experience and observation. Even an experiment on the animal does not eliminate trial on human beings because some drugs that are harmless to dogs are poisonous to man.

2. I would rather have them experiment on dogs than on my baby.

The answer is:

If I were your baby I would rather you would call a doctor who learned his business treating babies than one who spent his time cutting on dogs. Life is short and a doctor needs experience with sickness and disease badly. He is not getting it while he is mutilating dogs. One of our famous doctors, Dr. Osler, upon being asked how he diagnosed a difficult case, said "I saw one before."

3. It is your dog or your baby, which shall it be?

The answer is:

It is not your dog or your baby. Too often it has been your dog and your baby. If the doctors would pay more attention to babies and less to dogs, they both would be better off.

4. Do you want to go back to the "horse and buggy" days?

Answer:

It seems that we are pretty much in the "horse and buggy" age insofar as health is concerned. When the wealthiest Nation in the world ranks fifth to ninth in health among nations, and out of 13 million young men, finds 4 million classed in IV-F, it looks very much like our system is not so good.

5. All great advances in medicine came through animal experimentation.

Answer:

Medical history does not bear them out in this statement. Very few advances in medicine were due to animal experimentation.

6. How then, are doctors to learn about diseases if not by animal experimentation?

Answer:

From people who have the diseases. Many of the diseases of humans do not occur in animals. The way to learn to ride a horse is to ride him. You don't tie a sack of sand on his back and observe the results. You would never learn to ride that way. The best way to learn about diseases is to pitch in and get to work on people who have them. Keen observation and a large experience will

suggest an idea just as it did to Dr. Jenner about vaccination or Sister Kenny about poliomyelitis.

7. Ask your family doctor.

Answer:

This is a double-edged statement. It implies a challenge to the doctor to disagree with them, and a suggestion to him that they are so sure of his answer that an adverse opinion would brand him an ignoramus. I wonder what the family doctor would say if the patient would say, "I don't want you any more. If the vivisectionists know more about disease, which they must if that is the best way to learn about them, I would rather have one who practices vivisection more."

8. The people who oppose vivisection are nitwits, lunatics, and sentimental fools.

Answer:

The only justification I can see for the statement is that we are fools to let them practice such horrible cruelties in a civilized community. When they have to resort to name calling they must have a weak case. Questions of this nature should be decided on their merits and not upon the ability of one side to ridicule the other.

9. We don't use anybody's pet dog. We only experiment on a stray dog, or some homeless mongrel.

Answer:

The poor stray dog has feeling the same as the boy's pet and deserves the same consideration as the full-blooded dog, so far as kindness is concerned.

10. In the long run we even help the dogs themselves.

Answer:

If the dog could talk he would say, "For God's sake, leave us alone. We will take our diseases in stride and life as it comes, but don't crucify us in the belief that you might find out something about disease."

11. The president of one of our large universities is quoted as saying, "They could not teach medicine without vivisection." What could you say about that?

Answer:

I would say, "Then don't teach medicine. Throw it out of your curriculum entirely and teach the other arts and sciences. Any science that has to depend on such cruelty for its existence has no place in our institutions of learning. Throw it out, and then we can look up to your school and cherish it as a great American institution instead of looking down on it as a questionable place where stolen cats and dogs are bought at the back door."

12. A man's life is more important than a dog's, therefore I am in favor of vivisection.

Answer:

This statement is based on a false premise; that is, by the dogs losing their lives, human lives are saved. This is not true. In fact, I believe the very opposite is true. While these scientists are experimenting on dogs, people are suffering and dying for the lack of medical care. I would paraphrase the statement something like this: "A man's life is more important than a dog's, therefore I favor working on men, not dogs."

Now gentlemen, in conclusion let me say you have a golden opportunity here. Don't miss it. It is probably the greatest opportunity ever offered in your career to do something constructive for the people, the dogs, and the profession. You can start the ball rolling to change the trend in medicine.

Mr. Lemke hit the nail squarely on the head when he said we are in a rut. And I would remind you doctors who are opposing this bill that while there is a trend in medicine, there is also a trend in public opinion. By your unwillingness to get out of the old rut, you are

forcing us into State medicine. I will ask you to give this matter a little serious thought before you appear on this stand.

THE BLUE BABY CASES

In answer to the "blue baby" argument, I will say that such an experiment as Dr. Blalock describes in no way justifies the great mass of reckless and useless experiments going on in our laboratories. While the saving of these children is commendable, it is only a speck in the sky compared to what we should be doing, and could be doing, if we hadn't majored in animal experimentation. The number of cases suitable for this operation are comparatively rare, whereas the great majority are dying of the common diseases. I would illustrate it like this: The lake is full of drowning children. The life-guard swims out to the middle and rescues one child, brings him in and says: "Look what a wonderful thing I have done—saved a child's life." Whereas, if he had jumped in near the bank, he could have saved a hundred children. Thus, animal experimentation has caused us to concentrate on the rare diseases to the neglect of the common ones.

Suppose, in opposition to the "blue baby" exhibit, we should present the mothers of those children we didn't save, show pictures of the dear little tots and say, "Your child could run and play, could he not?" "He can't run now, can he?" A thousand mothers of children who died of common diseases, weeping and wringing their hands, would be just as dramatic as the "blue baby" cases, would they not?

Now, gentlemen, you have a chance to save millions of dogs from a most horrible fate. Are you going to do it, or are you going to vote for the continuance of mass cruelty?

MR. BATES. Doctor, the schools that you graduated from are so-called accredited schools of medicine?

DR. ALLEN. Yes, sir. Class A schools.

MR. BATES. Class A schools. You have practiced medicine and surgery for a period of many years, you say?

DR. ALLEN. Yes.

MR. BATES. Have you ever been a member of any hospital staff?

DR. ALLEN. Yes, I have. I have been on the auxiliary staff of a couple of them and attending at large hospitals.

In fact, I have not had much time to pay much attention to some things like that like I should.

MR. BATES. Have you performed many operations during your lifetime?

DR. ALLEN. I would not say a great many. I have performed quite a few, but I am not a famous surgeon; I do not want to claim that, although I have done some very good operations.

MR. BATES. Now you have heard the evidence presented here by some very eminent surgeons this morning?

DR. ALLEN. Yes.

MR. BATES. With the living evidences of three children would you say the experimentation as described by the doctor from Johns Hopkins was a contributing factor toward the cure of those three children?

DR. ALLEN. Yes, I have no doubt about it.

MR. BATES. So you would think the experimentation carried on with the dogs has something to do with the saving of these three children?

DR. ALLEN. Yes. Many things can be said, I think, though.

MR. BATES. Well, what is your opinion as to whether or not the statement of the doctor from Johns Hopkins is correct?

DR. ALLEN. It is correct.

MR. BATES. Then as the result of experimentation it saved the lives of these three children. Is that right or wrong, in your opinion?

DR. ALLEN. That is right.

MR. BATES. Now, does that same thought apply to filariasis and these other diseases that have been mentioned here this morning?

DR. ALLEN. That comes under the heading of uncommon diseases, or diseases which the average practitioner in this section does not have. Rare diseases. I think if we are going to have some kind of system of studying disease we must study the diseases we are all getting and not something way off.

MR. BATES. Well, at the same time would you think we might pay some attention to these other diseases which are troubling the human family? Would you say, in other words, that the experimentation with dogs contributed very largely to the solution of many very serious problems affecting the medical profession in the cure of diseases in the human family?

DR. ALLEN. I would say it has contributed some.

MR. BATES. It is limited?

DR. ALLEN. It is limited. I do not think anywhere near the amount they claim for it.

MR. BATES. Well, would you say of what has been accomplished that the end justified the means, the experimentation on all these dogs and animals, that the results obtained justify the means?

DR. ALLEN. Not to the extent they are going for it.

MR. BATES. Well, let us take what came out here this morning, the evidence in these three children. Do you think the experimentation on the hundred dogs justified the means in the saving of the lives of these three children?

DR. ALLEN. Did the doctor say how long it took him to determine this?

MR. BATES. Well, you heard the evidence.

DR. ALLEN. No, I could not hear him. It is very hard to hear from over there.

MR. BATES. He attributed the disease these children were suffering from by his direct experimentation with dogs, and he had the model of the heart here. You saw that?

DR. ALLEN. Yes. I think that is very technical and is a very fine exhibit and a very dramatic thing, but I do not think it belonged here. This is a committee of laymen.

MR. BATES. But do you believe what he said was true?

DR. ALLEN. Yes.

MR. BATES. All right. That is all we wanted. Then there is no need of a layman finding fault with it if you as a physician and surgeon agree with it.

MR. McGEHEE. Doctor, in your enormous practice over a period of 25 years, I believe you said you treated 100 patients a day. In the

treatment of those patients over this long period of time it would mount into thousands.

Did you ever use any of the methods that medical science has evolved from the experimentation with dogs, in the treatment of any of your patients?

Dr. ALLEN. Well, mostly not, but it would be hard to say. You take a text book on the practice of medicine and they do not state in there whether this was found out on dogs or not. We do not know. We just follow the text and the teachings in the university.

In the Materia Medica they do not say what part each has played. I think one does not know.

Mr. McGEHEE. Any further questions?

Mr. BATES. Doctor, I wonder if you would have a word to say in response to the criticism of the medical profession, in just a word? Do you think the justification of the work that you are carrying on, in the light of what these two doctors say—

Dr. FISHBACK. Well, I happen to know about Dr. Blalock's work. It entailed up to the time he did his first child about 30 dogs. About 80 percent are alive.

The difficulty is they come to him too old.

Mr. BATES. There were about 30 dogs involved?

Dr. FISHBACK. Yes. That is hearsay on my part. I think he made that statement before a committee in New York recently.

Mr. BATES. I see.

Dr. ALLEN. May I say the States that have antivivisection laws have exceptions where an operation like that may be tried on animals.

STATEMENT OF HON. WILLIAM LEMKE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH DAKOTA

Mr. McGEHEE. Mr. Lemke, do you have something?

Mr. LEMKE. Mr. Chairman, I have, but the bell has rung and we are supposed to be over there.

I have two statements, one from Dr. Held and one from Dr. Crum, and I also have statements from newspapers, from men who have had considerable to do with forming the policies of this Nation, and I would like to introduce that, also to have permission to take excerpts from former hearings and add to this record so they may be part of this hearing.

Mr. McGEHEE. You may do that.

(The letter referred to from Dr. Held and the newspaper clippings follow:)

[New York Journal-American, January 22, 1946]

DENOUNCE SORDID EPISODE IN HISTORY OF MEDICINE

(By Dr. J. Howard Crum)

As a doctor, I naturally feel that if any science has good in it, then I want it. But I believe, and firmly believe, that no good has been accomplished by vivisection of dogs that could not have been secured by less cruel methods.

The story of vivisection is not a pretty one; it is, in fact, a sordid episode in the history of medicine and is contrary to all our human concepts of decency. When science loses its humanity, then it is leading us into false paths.

I could not and do not say that certain results have not been obtained from vivisection—but they have been obtained at a terrible price in agony and unspeakable anguish and moreover could have been obtained otherwise.

I presume that Hitler may have accomplished some good for the German people by his methods, although I must admit I do not know what, just as for every atom of pain and suffering that vivisection has saved, pain and suffering beyond human comprehension has been inflicted a thousand-fold.

This I know: The vast majority of operations upon dogs are useless, senseless, and unnecessary. Many times they are simply part of a hobby of some out-of-this-world professor whose hobby it is to do experimental operations just to see what happens, if anything.

If any mercy should happen to come as a result of his work, it is simply a byproduct of his cussedness or mercenary efforts.

I say, let these so-called scientific minds go to work and create new and better methods of carrying on their investigations than by inconclusive operations upon animals. And that is exactly what they will do if vivisection is outlawed.

I have more confidence in these scientists, in fact, than they seem to have in themselves. For they will never change their methods to a really scientific procedure as long as the present inexact cruelties are permitted and defended.

At the present time, as usual, the big business interests of organized medicine are arrayed against the antivivisectionists. Naturally, they say that vivisection is absolutely necessary. You should not expect anything else.

These men will not admit that the public is against vivisection. They say only that the public must be saved from itself, that the public is sentimental, that its spokesmen don't know what they are talking about.

I know what I am talking about.

I am not a fanatical sentimentalist. I am a doctor who simply feels that unnecessary cruelty is wrong and that the hearts and minds of millions of normal citizens are more apt to be right than those of a few hundred scientists that have become warped and sterile of feeling.

I know, and I am sure the opposition knows, that many reputable physicians are opposed to vivisection. Yet it is practically impossible to get them to speak out because they are afraid of the organization.

So powerful is the latter that were it not for the fact that I would be willing to retire, I confess that I, too, might be afraid to speak; might not have the strength of character to attack a vicious practice I think should be wiped out now and forever.

May the present campaign of the Hearst newspapers succeed where so many others thus far have failed.

IN RE VIVISECTION REGULATION (LEMKE BILL, WASHINGTON, D. C.)

My name is William Held, I am a physician practicing in Chicago and a graduate of law. Being on the unpopular side of the present inquiry, I would like to clarify my position in the matter. I am not, nor have I ever been a member of any antivivisection society. When the sponsors of the bill under consideration, invited me to come to Washington, I declined because of my belief that under present conditions, when the general public is not in possession of all the facts, the defeat of such legislation is a foregone conclusion. I stated that the influence exerted by an array of physicians, vivisectors, and professors, who occupy top positions in famous universities, and who are determined to defend vivisection, would not easily be counteracted by ever so logical arguments and facts, presented by a group of sincere and well meaning humanitarians, a minority group, if you please, who unfortunately may not be able to muster the wide spread publicity which the opposing faction commands.

When again urged to come and noticing that the issue concerns the "Humane regulation of vivisection" I saw no reason to refuse.

Surely, no member of the most noble of all occupations, that of healing the sick, would object to regulations which aim to insure humane conduct in animal experimentation, any more than physicians would fail to adhere to established rules and regulations in the performance of surgery on human patients. I am acquainted with practices obtaining in vivisection laboratories. At various times while engaged in postgraduate work abroad, I attended vivisection classes conducted by Du Bois Reymond, chief of the physiological department of the University of Berlin. And again at the University of Halle, I was privileged to obtain personal instruction by Emil Abderhalden, head of the physiological department of that university. During a stay of almost 3 years in Berlin, I attended clinics at the Charite. I have no desire to air opinions of my own, but merely to call attention to certain authenticated, hard facts, stubborn facts which may invite

doubt on the part of the uninitiated, may be denied and decried, but do not brook successful refutation.

If in the interpretation of these facts one senses an indictment, it should be credited to the facts that speak for themselves, and to logical, analytic thinking which reasons from cause to effect.

Champions of vivisection claim that animals employed in experiments are first anaesthetized, and if mutilated during operations, are not allowed to come out of the anaesthetic, but are promptly killed at the conclusion of the experiment, in order to prevent suffering by the animal.

It is further insistently proclaimed, that most, if not all, scientific progress, all great discoveries in the realm of healing, prolongation of health and life-saving methods, in other words, every great boon to suffering mankind, has been won via the vivisection laboratory.

If stern reality would substantiate these claims, then, I dare say, there would be no clamor for reform and regulation of vivisection: antivivisection societies would not be heard from and meetings, such as this, would not take place.

Let me be more specific: As a general rule dogs are poor anaesthetic risk, as any of the experienced experimenters here will admit, hence dogs are frequently kept on the safe, the borderline of unconsciousness, with consequent suffering of the animal. In certain experiments anaesthesia is out of the question, when the purpose of the test is to ascertain reactions, elicited on feeling animals, so that recording instruments, ingeniously attached to eyes, muscles, nerves, and other body organs, or to the exposed brain, may register the effect of experimentally induced irritation, fatigue, and other stimulation, chemical, mechanical, electrical, or thermal. For instance: When the body of an anaesthetized dog is scalded by pouring boiling hot water on it, or seared by red hot irons, the investigator observes the immediate effects, such as oozing sores and blisters. Later, after the dog has recovered from the anaesthetic, the vivisector studies the formation of scars and adhesions and watches symptoms of postoperative shock, as evidenced by the behavior of the miserably suffering, wide-awake animal. Also the effect of extensive burns on internal organs is studied.

Another experiment consists in the insertion of a large rubber balloon, into the stomach of an anaesthetized dog. The rubber bag is then inflated to completely fill and stretch the stomach "in order to prevent vomiting."

During repeated inflation following the original operation the dog is in the waking state. Some of the 14 dogs so used in 1 series of this experiment, pulled the rubber bags out of the stomach through the opening made by the operator. The bags then were again inserted.

According to Dr. IRY (*Archiv International Med.*, March 1932, pp. 439-452) "the last of the 14 dogs, after much retching died under symptoms of strangulation." Physicians knew for a long time, without resort to vivisection, that sudden or sustained extreme dilation of the stomach and intestines, may encroach upon the diaphragm and heart and cause death "under symptoms of strangulation." Not infrequently such death of human patients may have been erroneously reported as due to cardiac disease. The effect of anaphylaxy, that is under-protection, the opposite of prophylaxy, is demonstrated on wide awake, never on anaesthetized animals. An injection of a foreign protein (foreign to the animals protein) is given. Following a second injection in the same animal, death results under extreme expansion of the lungs. Notwithstanding the availability of excellent motion pictures, illustrating every minute detail of the experiment, from first injection to the animal's death, photographs which would serve admirably for teaching purposes, instructors continue to treat students of every new class in physiology to the actual demonstration, on live animals. Resistance to fatigue and exhaustion is studied on waking, not sleeping dogs. It cannot be tested otherwise. The animals are forced to keep running on a motor-driven treadmill for many hours. One dog was made to run for 17 hours, with 5 minutes rest between hours. The dog ran 82 miles and climbed 14 miles (much higher than Mount Everest) at a speed of 5 miles per hour. Climbing was made more difficult by raising the moving platform to a greater angle of incline (*Harvard Univ. Jour. of Phys.*, Vol. 77, No. 1).

To further learn the degree of fatigue which a dog may be able to endure before collapsing from exhaustion, the animals were put into a large swimming pool and forced to swim uninterruptedly from one end of the tank to the other. When a dog got tired and tried to climb out of the water, the animal was pushed back. "To make the work more strenuous" in the words of the experimenter, "weights of 1 pound were fastened to the dog's neck and swimming enforced

to complete exhaustion" (demonstrated on 10 dogs. W. F. Schultz and Minerva A. Morse—University Chicago, Jour. Phys., 1938—January, p. 293).

I am not arguing the value of the test at this time, but wish to invite attention to the fact, that in such experiments the animals are awake and keenly sensitive to the torture inflicted on them. To release epileptoid attacks in dogs, that is epilepsy simulating symptoms, electrodes are fastened to a portion of the exposed brain and to the eye of the test animal. By causing a galvanic current to pass through the field between the two electrodes, muscle contractions, jerky movements of limbs occur. At the conclusion of this experiment on the conscious dog, the operator announced his findings to the effect, that "the convulsions observed may not be the same as exist in genuine idiopathic epilepsy." In other words the cruel experiments proved nothing else, if it proved anything, except that muscle contraction may be elicited by electrical shock. Concerning the great strides in medical progress and the reduction of disease and decline of mortality rate, vivisectors are wont to wax oratorical. It is usually claimed that vivisection has greatly advanced research in cancer, tetanus and is expected to do much for infantile paralysis. It is claimed that the diabetic mortality has materially declined since the event of insulin. As to the latter statement, nothing is further from the truth. Not because, but in spite of insulin, the diabetic mortality has reached an all high for all time, since 1922, the "insulin" year, to 1935. This record has not been reduced. (See Vital Statistics, Bureau of Census, May 10, 1937.)

No fair-minded person would try to minimize the credit due Banting for his work in making insulin available. But by the same token, it may be well to remember, that insulin was discovered, not by Banting, but by Langerhans, in whose honor the sugar-splitting portion of the pancreas, the "islands of Langerhans" are named.

The medically ignorant public has heard so much about diabetes, insulin and dogs, whenever vivisection is talked about, that many actually believe that insulin is obtained from dogs, and that only by the sacrifice of a very large number of dogs, insulin has been developed. The fact is, that while in Chicago and other large cities, thousands of dogs are vivisected yearly without epoch-making discoveries. Banting used exactly 15 dogs in his experiments, and then to find the solution to the problem, after obtaining pancreas from cattle at a slaughterhouse. While not denying the beneficial effect of insulin as an emergency measure, one should bear in mind that it is a double-edged weapon, which may reduce the blood sugar level below the safety point, under certain conditions. As far as I know, no defender of vivisection has ever called attention to authoritative findings, with reference to the lowly blueberry, which yields an extract, which has served not only as adjunct but also as substituted for insulin, and "tends more in the direction of cure, than those of any other method known under any diabetic treatment, and prevents a dangerous lowering of blood sugar." (Authorities: E. J. Kraus—Blatherick, Maxwell, Sensum, Lanta Epinger, E. Freud, Watson, Allen, and others. Some of these bespeak pancreas extract as effective antidiabetic.)

Vivisection in cancer research, as in other most important problems facing the clinician, has not only failed to yield therapeutic results, but has retarded progress, because the experimenters are wasting precious time trying to find something that does not exist, namely a local cause of the disease. While time, huge fortunes, and material is prodigically wasted in cancer research via the vivisection laboratory, findings of such men as Sir Lane, Sir Bell, Halliday, Warburg, Lewin, Hoffman, Abderhalden, and others, far advanced in cancer study, are ignored. These authorities have repeatedly stated, what every unbiased cancer student knows, that cancer is a constitutional disease, not a local one. The appearance of a tumosity, so-called early diagnosis is held out by orthodox physicians who subscribe to the local disease theory of cancer, as the only chance, yes almost a promise of cure, when promptly operated on. Nothing is said about the well-known fact that the surgical removal of a malignant growth, can no more cure cancer, than would removal of a chancre, the external lesion of syphilis, cure that disease, because that too is a constitutional disease which defies local treatment. A cancerous growth, far from being an early sign of cancer is the latest, the terminating external expression of a constitutional disease, the development of which to the formation of the tumor, may have required years. Inevitable the earliest "early diagnosis" comes too late. Removal of this misnamed "early sign" is followed by metastasis, the springing up of cancerous growths in other parts of the body. That the disease is constitutional is evidenced by the fact that the Abderhalden serological test, by employ-

ment of a blood specimen from a suspected cancer patient, reveals the presence or absence of malignancy, without resort to exploratory surgery. The degree of modern cancer therapy's efficacy, is strikingly demonstrated by more than 166,000 cancer deaths annually. In infantile paralysis, animal experiments have also thus far produced no effective therapy, yet the answer to this problem may exist at the very moment and is deliberately ignored, while polio victims in large numbers, are doomed to lifelong crippling. As to tetanus (lockjaw), physicians well know, that no case in the developed opisthotonos stage (that backward curving of the spinal column) has every been cured by administration of antitetanus serum.

Here also a treatment discovered outside the vivisection laboratory, and readily available for a good many years, and known to research men, is completely ignored. Its efficacy is vouched for by highest authorities.

I know of no vivisector who has ever divulged this information, this life-saving form of treatment of lockjaw to anyone. All presentations and appeals for investigation of this and other better, harmless, and inexpensive methods of therapy, which do not emanate from quarters of those who subscribe to uncontrolled vivisection, it seems, are met by thunders of silence.

In conclusion I wish to say, that even if it were within us to minimize or ignore all objections raised against uncontrolled animal experimentation there remains a most important, all else overshadowing factor to consider.

To me, this association between vivisection and its hidden possibilities, is a horrible contemplation. It is not because I like dogs, but because I like humanity more, that I shudder at the thought, that long-continued and repeated infliction of suffering to animals in vivisection, may make it easy for some overzealous investigator, in his thirst to wrest some secret from nature, an answer to a problem, to step from animal to human experimentation. This haunting fear is in part engendered by the knowledge that already hundreds of healthy children, in whose case neither diagnosis nor treatment called for the infliction of painful "tests" have been made to serve as human guinea pigs. I am not referring to the heinous human vivisections perpetrated in Nazi Germany, but of deeds in this great country of ours, where we pay lip service to freedom from fear. One investigator, here in the United States, after admitting the possible grave danger connected with a certain test, attempted to justify the infliction of the experiment on children, by the statement that he considered solving of a certain problem of great importance. Note, if you will, that despite the importance attached to the test, this good experimenter did not expose his own, nor the body of one of his children, but was content to use a helpless orphan.

In another instance, one bent on research via human material, said: "If we can learn one single fact, a human life is not too high a price to pay." Note again, that this particular humanitarian speaks not of his own, but of the life of another human being.

One vivisector, having experimented on scores of helpless children, declared that in order to settle once and for all a disputed diagnostic argument, he "took the risk" to apply a certain eye test in these many children. Again it should be borne in mind, that these tests were not called for as a matter of diagnosis or treatment in the case of these children, it was just an experiment inflicted on healthy babes. This particular experimenter can in the twinkling of his eyes perceive anything within the range of his vision, he can scan the horizon, he can see the skies, flowers, faces of loved ones; he can see to write and read; he can see the road ahead of him; he needs no "white cane" to "feel his way" as blind people do. When he opens his eyes, millions of rays bombard the retina of his eyes—in short he can see. Yet from this mighty ocean of light, he, this seeing man, cannot give a single ray, not the tiniest spark of light, not a speck of sight, to any child that may have to grope in darkness, because of the risk he, the experimenter, took.

Anyone initiated in the proceedings obtaining behind the doors of some vivisection laboratories, and understanding the power of suggestion and the force of habit, and who realizes the fact that the cruelty instinct is innate in all mankind, only suppressed by what we call civilization, but easily resurrected at a favorable psychological moment, anyone realizing these facts, for facts they are, should clearly see the dire need of fair and reasonable legislation for the enforcement of the humane control of animal experimentation. Such control, for very obvious reasons, should be vested in a committee of intelligent lay people.

To ignore the existence of this need may be productive of practices which some believe to be possible only under a Nazified regime.

TESTIMONY OF JAMES F. CUNNINGHAM, 6002 SYCAMORE ROAD, BALTIMORE 12, MD.

THE WAYS PROCURERS GET HUNTING DOGS

The average hunter goes hunting around 6 o'clock in the morning or thereabouts. About 5 o'clock in the morning, procurers take a couple of females which are in season and run them over the territory generally hunted. These females are allowed to run loose for about 45 minutes and they are walked over the good portion of the territory hunted. They are then led back into a wired-in corral. Once these hunting dogs get into this corral, they are finished. Then they are gathered up and trucked away to a safe place to cool off; their mouths are taped with ordinary bicycle tape to keep them from barking or drawing attention. They are then, at a later date, when a sufficient number is gotten together, trucked off to the loading station of the syndicate and are sold according to weight and size.

Now we come to the dogs known as hot dogs. These are the dogs that are picked up in the smaller cities, taken out to the out-skirts of the country parts with their mouths taped to keep them from barking and are left there for several days to cool off. It is a known fact that the average dog can survive about 21 days without food. Some larger dogs have been known to go 30 days. These dogs are fed only water with a syringe through the side of the mouth to keep them surviving. Now these dogs in turn are trucked in to the syndicate, of which there are many and sold as per size and per weight.

Now the main syndicate operates as follows:

After they get sufficient dogs to fill 5-, 8-, and 10-ton trucks, many of which are very elaborately lined with 6 or 8 inches of celotex, which has a tendency to make these trucks soundproof in transit, they are loaded aboard and shipped to various laboratories. These dogs are generally given one feeding before leaving and in many cases have had no food since they were trucked by these scoundrels. Their mouths are again retaped and they are tied to the inside of the truck on a hand rail so their front feet cannot touch the ground. This has a tendency to keep dogs from barking as it more or less chokes off the wind but not sufficient to choke them. At the front of these trucks, on the right hand side, there is a pane of glass about 12 by 14, so the inside rider can note when they are coming to a red light or where they may have to stop for traffic. This inside rider's job and instructions are that should a dog be successful in pawing off the tape and attempt to bark or whine, he strikes the dog over the head with a large club and knocks him unconscious. These trucks that truck dogs never leave the main station until about 10 o'clock at night; for most deliveries are made to the various laboratories and hospitals in the early hours of the morning. This is done to eliminate any suspicion as to their cargo, as the streets are generally clear of people at that time. They are usually driven up to a side door or an alleyway leading to the various institutions who use them for vivisection purposes. If you gentlemen could see some of the fine pointers, rabbit hounds, bird dogs, lovely dogs that are household pets, et cetera, that have been trucked in these trucks, your decision on this gentlemen could be made in 2 minutes.

Now I'll admit that you must be somewhat at a loss. The medical profession tells you it is necessary to operate on these dogs. You have heard or will hear testimony that it is not necessary. England and Germany has prohibited this for years. Now why is it done? It can't be that the doctors personally like to see a dog suffer or to see it bleed or to cut it open or to sew it up. The reason vivisection is practiced on such a wide scale is as follows:

The New York Herald carried in its financial page report recently that the export, remember I am speaking of export only, trade of the American drug and pharmaceutical houses have totaled \$150,000,000 for the year of 1945. These statistics have all been published from year to year. Gentlemen, the serum industry is the one who is profiting and the serum industry is the one who is fighting for vivisection. We would like to point out one instance to you: The Park Davis Co., only one of 91 such establishments in the United States, show that in the year of 1934 their assets totaled \$43,000,000, with a clear profit of \$10,000,000. Don't forget gentlemen that in 1934 that was a peace year as we were not at war. Can you imagine what their assets were and their profits were during the years we were at war? Now out of this \$10,000,000 clear profit, it is very logical that they could spend a \$1,000,000 for a lobby, so you see that for years we have been fighting a terrific uphill fight. The medical profession and the serum industries have always taken the stand in hiding behind the cloak

that if vivisection was stopped, the medical profession would deteriorate. This is ridiculous. Why practice on poor helpless defenseless animals. There are many bodies or cadavers which are available and which are human bodies in every structure for the students, doctors, etc., to operate on, but we go back to the old story again to say that the dogs and cats are so cheap and plentiful—so what?

[From the Times-Herald, February 24, 1946]

DUDLEY FIELD MALONE PLEADS CASE FOR DOGS—ANTIVIVISECTION VIEWS AIRED IN STIRRING LETTER

In a letter fully as moving and impressive as his defense speech in the evolution trial at Dayton, Tenn., and his other famed courtroom pleadings, Dudley Field Malone, former Assistant Secretary of State, one-time collector of customs for the port of New York and pioneer advocate of women's suffrage, has written the Times-Herald:

"There is now pending before Congress and awaiting a public hearing before the Committee on the District of Columbia, bill 491, and I commend your gallant support.

"Millions of men and women in this country are fighting against the widespread, ruthless, blood-letting cruelty to dogs by the vivisectionists.

STUDIED PREVIOUS HEARINGS

"I have recently studied past hearings before congressional committees and legislative committees of the State setting forth views of those for and against vivisection. Generally, these discussions have produced more heat than light.

"The hearings have invariably ended in mere medical disputes.

"To me, the issues involved are simple. There are strong and precisely worded 'cruelty statutes' in many States with penalties against the torture or abuse of living animals.

ADMISSION OF GUILT

"The vivisectionists, however, have had amendments passed absolving themselves, their so-called 'scientific laboratories' and all medical institutions from the provisions which specifically define cruelty to animals.

"By these amendments, the vivisectionists publicly admit that they are guilty of torture and cruelty against animals, but do not wish to be held to the same penal standards as the rest of us in the treatment of our animal companions.

"There is a large and growing section of medical authority in the country of the opinion that certain scientific results obtained from operations on live animals could have been better obtained by careful and intelligent observation and diagnosis on the part of scientists and doctors.

"Many of the medical associations of this country standing behind the reactionary old-school methods of the vivisectionists are among the most reactionary groups of the medical profession.

"These medical associations have not discouraged throughout the country hundreds of medical clinics which are mere rackets for quacks and incompetent doctors to charge large fees for doubtful services.

RAPS FAULTY DIAGNOSES

"If these same medical associations would bend their energies toward educating medical students and doctors in the increased power of observation in diagnosis we would not have so many wrong diagnoses and hundreds of operations on people for things they never had.

"Of course, anyone who advocates the right of living animals to live and be as happy as we humans try to be in this world, is called a sentimentalist.

"However, every worthy cause has always had its sentimentalists. When we fought the good fight for national women's suffrage we were called sentimentalists by the practical politicians. When we fought the fight against the control of government by the old barons of Wall Street, we were called radicals and sentimentalists.

"Yet, it has been my experience when leaders in opposition to a great cause resort to calling names, it is only because they have run short of valid arguments."

[From the Times-Herald, February 21, 1946]

CRUELTY TO DOGS IS CRUELTY TO MAN

On February 28 a special subcommittee of the House Committee on the District of Columbia will begin hearings on the bill by Representative William Lemke (Republican) of North Dakota to abolish vivisection of dogs in the District.

You will hear and read a lot more on this subject as time goes by, so herewith a round-up that may be useful in helping you decide what it is all about.

WHAT IS VIVISECTION?

Vivisection is the practice of conducting experiments upon animals in the name of scientific research. This practice ranges from the introduction of student surgeons to the feel of the knife by letting them cut live animals in our college laboratories, to the elaborate and complicated performances of the senior research scientists in which dogs are baked, frozen, skinned, driven crazy, and otherwise deprived of life by means nobody could reasonably wish upon another human being.

Vivisectionists say these things are necessary to the free progress of scientific knowledge. They also say that vivisection is not really cruel because it is conducted under anesthesia, but if it does inflict pain, that is excusable because of the resulting gain in knowledge for the welfare of humanity and animals as well.

IS IT HUMANE?

People who oppose vivisection say that it is neither good science nor good conduct. They hold that the vivisectionists must be wrong on one of two points when they say first that vivisection is conducted under humane conditions, then in the medical journals publish reports of experiments in which animals are put to slow death without anesthesia.

This writer has just seen a picture of a complicated machine which records the convulsions of a dog dying with its spinal cord cut in two places and then shocked by electricity. This picture first appeared in the Science News Letter of January 8, 1938.

The Washington Star of December 29, 1937, reported on the use of this machine as follows:

"The dog could see, hear, smell, and taste with its head, but it couldn't control the movement of one of its paws from the brain."

DOES THE END JUSTIFY THE MEANS?

If such practices as the above are the way to knowledge, then why not be logical about it and really go the whole route? The Germans, who were great vivisectionists, went the whole route under Hitler. They vivisected not only just dogs and cats. They got down to business with the real article—the human species. Hitler fed them thousands of what he called "useless" humans for their experiments. And they cut, froze, boiled, and infected the subjects wholesale.

Did science learn anything from those experiments? Was scientific knowledge advanced? Was the means justified by the end?

It will be interesting to hear from the defenders of vivisection on this point when the Lemke hearings begin. Of course they are going to run for the escape hatch and say that over here we practice vivisection on dumb animals just because we would not stoop to vivisection of human beings, that vivisection of lower breeds saves us from the need to experiment on man.

THEY CAN DO WITHOUT IT

Let's just see if that's so, too. In England, the brakes were put on vivisection nearly three generations ago. If medical science cannot flourish without vivisection, then after three generations English medical science should be showing its weakness. Does it? Let's hear from the vivisectionists on that. Are English surgeons failures because they can't cut up dogs at will? Do English doctors fail to understand the human nervous system since they can't cut dogs' spinal cords and electrocute them? Is English research science a flop?

Before you answer that you ought to know that a Scot by the name of Sir Alexander Fleming, working in England, in an English laboratory, is the present world hero of medical science for his discovery of penicillin.

Dr. Fleming discovered penicillin by studying the reactions of mold in a glass jar and using the brains that God gave him, not by killing dogs. So English research science seems able to stagger along without vivisection.

And English surgeons and medical practitioners rank across the board as able as any in the world. Without benefit of brutality.

A BLOT ON SCIENCE

For that, in the final analysis, is all that vivisection actually is, the dark and brutal side of human nature coming out once more as a blot on scientific progress. Those who indulge in vivisection are encouraging a terrible thing in themselves, the natural human inclination to be brutal and cruel to those who cannot fight back. Nor do they yield back any gain either to the world or themselves, that justifies their conduct.

Cruelty to dogs actually leads straight to cruelty to man. Look at the record. Science has shown itself incredibly cruel in Germany and in Russia, both nations that have encouraged vivisection, and let their scientists do what they will. It must be stopped in America.

Write Representative Lemke your support of his bill, and when the hearings begin, do the same with respect to the House Committee on District of Columbia Affairs.

Mr. LEMKE. In order to give you some idea of the battle which has been carried on for the purpose of preventing the cruel practice of vivisection of dogs, let me call your attention to the hearings that were held back in 1896 and in 1900 on a bill which was introduced by Senator Gallinger. I do not have at hand a copy of the 1896 hearings, but I would like to call attention to the hearings held in Senate District of Columbia Committee on S. 34, which was a regulatory measure, similar to the law of England, on February 1, 1900. To give you an idea of the testimony submitted at that time, let me quote from Dr. Matthew Woods of Philadelphia:

According to the plan we had arranged for the discussion of Senator Gallinger's bill for the further protection of animals from cruelty in the District of Columbia, it was decided that after the opening speech by Mr. Perry, I, as one of the physicians in favor of the bill, should lightly sketch the absurdities, inutilities, and horrors of vivisection, and urge the necessity, because of its liability to abuse, for having it brought under legal regulation; and Dr. Leffingwell, with his ample qualifications, in a concluding speech, after both sides had been heard from, was to have corrected the misstatements of the opposition.

Dr. Leffingwell, however, because of an unexpected turn in the discussion, found it necessary in his splendid remarks to deviate from the original plan, so that it remains for me to take up as far as I can find time the arguments, or rather assertions, of the various speakers and correct them.

I regret the necessity for this, but the needs of the case demand it, and I obey.

We do not often have the opportunity of hearing the subject discussed by so many capable and directly interested persons as appear on the opposite side, most of the speakers being vivisectors.

The reputations of some of them as specialists give so much importance to even their merest unverified assertions that it would be a serious injury to our cause to permit any stultification of human conduct that might occur by allowing their errors of statement, deduction, and insinuation to pass undetected, uncontradicted, and uncondemned.

* * * * *

There are about 160,000 physicians in the United States. Not 400 of these are vivisectors. There are, perhaps, as many people vivisectors outside of the active members of the medical profession as in it.

The great balance of doctors, therefore, who do not vivisect and who have never even seen an apparently painful experiment, cannot be interested in the reform of a subject of which they know so little. Most of them think all painful experiments are done under the influence of an anesthetic and without the

infliction of pain, and so little do they know that when you tell them the anti-vivisection societies do not oppose these they are astonished.

Question any general practitioner on the subject and you will be surprised how little he knows correctly about vivisection except what the antivivisection societies have told him.

It is the tragedies enacted in secret by the 400, with their satanic ingenuity and cold-blooded indifference to suffering, that excites the antagonism of the humane and that has caused a demand for the enactment of this bill.

* * * * *

We have no desire to underrate the invaluable service of the surgeon when we say that it a great extent his art is a mechanic one, not essentially requiring the possession of the more exalted qualities for its perfection, and that it is often because of the obtuseness of the public, incapable of appreciating his finer work as a physician, that his surgery becomes so conspicuous. The man who cuts off a leg is more talked about by a wonder-loving laity than the man who saves it; but when a surgeon allows himself to be carried to an Olympia of fictitious glory by this ignorant adulation, he at least lays himself open to criticism. He should bear his blushing honors with more becoming modesty and not imagine himself a surgical Pope.

In the name of suffering animals, outrages upon whose rights I have ever attempted to diminish, I think I have shown that Dr. Keen's testimony is not altogether impeccable, and that, too, without intending to cast reflections upon his integrity as a man or his skill as a surgeon. Points of view must necessarily differ, but, whether I have succeeded or not there is one thing certain—this question of vivisection is not one of utility but of right and wrong.

According to pure abstract morality we have no right to inflict suffering on others that we ourselves may be benefited, and if not now, the time I believe must come—if the race is to be saved from again lapsing into a barbarity worse than that from which it sprang—when living, suffering, sentient creatures will be protected from the vivisector's knife.

On Saturday, November 1, 1919, a hearing was granted on S. 1258 of the Sixty-sixth Congress, first session, which was a measure similar to the one of today, absolutely prohibiting vivisection. I would like to quote just one paragraph by Dr. John Hutchinson of New York City for your information.

DR. HUTCHINSON. Experiments made upon animals cannot be applied to men without extreme caution, and careful analysis rejects most of them. I think we have every reason to say that what is given out to the public from time to time as a decided discovery, a great advance in medicine, is always open to question on the side of its specific advantage; and I might add, perhaps, that as I see it from professional observation, we have in the medical profession three classes of men in respect to their view of vivisection. We have a group of men who abhor vivisection, who abhor cruelty; on the basis of cruelty, first, if you will, and on the basis that it is unproductive of good; that it does not lead anywhere; that it does not give the information explicitly sought.

Then we have another large class of men who think nothing about it one way or another.

Senator NORRIS. You are speaking of physicians now?

DR. HUTCHINSON. I am speaking of physicians; three groups of the profession as I see it. This second group are busy with their work and they accept what the large field of medicine offers, vivisection being one of those practices.

Then we have the so-called expert scientist, who feels that nothing whatever should block the pathway of the man of science, meaning by that nothing whatever should thwart his will.

I was talking on this very question the other day with a man who was an able, growing young physician. He showed the greatest disgust at some of the remarks I made and would not discuss the thing at all and said that he considered it was not only stupid but quite out of character for anybody to oppose the laboratory experiments, however they were conducted, and he displayed a great deal of feeling.

Senator NORRIS. Do you think that experiments on dead animals result in good?

DR. HUTCHINSON. Vivisection, of course, is very useful to the man who needs to dissect, but he need not practice on animals at all. Having done a few dissections of cadavers—

Senator NORRIS. That is sufficient.

I wish now to call your attention to parts of the statement of Walter Robert Hadwen, M. D., Brunswick House, Gloucester, England, which is found in the hearings held June 30, 1921, on S. 758, Sixty-seventh Congress:

With regard to blood pressure, in that I know that a vast number of experiments have been done upon dogs, and all I can say is that it was absolutely unnecessary. There was no discovery whatever made in regard to it, because there was no discovery to be made. It is a thing that everybody knows—every medical man knows—perfectly. One animal differs so much from another that you could not possibly argue from the blood pressure of a dog—

Senator ASHURST. You say one animal differs too much from another. A dog anatomically is somewhat like a human being, and—

Dr. HADWEN. I beg your pardon, sir; a dog is very greatly different in structure from a human being and different in every particular.

Furthermore, the juices are different. The difference in the juices of the intestines are such that you cannot argue from one to another; and even so great a surgeon as Dr. Cleaves has declared that in experimenting upon dogs in order to arrive at some definite conclusion to assist him in his work in abdominal surgery, he found it completely unfitted him, because of the difference between the canine and the human. I need not refer to the brain. I need not refer to other organs of the dog. Your eyes can see for themselves whether the dog's leg, particularly the front leg, compares with the arm of a human being. Anatomically, sir, I must entirely differ from the statement you have made.

Further, then, if two organs differ so much from one another, how much more must the animals differ from human beings? And therefore from these many experiments—and they have been very brutal experiments—that have been conducted upon dogs in regard to blood pressure, I say nothing has been gained, and also it was absolutely unnecessary to have done it at all.

With regard to the question of the pituitary gland, supposing that everything that was claimed for it was true—and there are very grave doubts; there is a great deal of exaggeration with regard to the pituitary gland as I know by practical experience; again I say that it was unnecessary. The matter of getting the pituitary gland was nothing more or less than as a byproduct of the slaughterhouse; and assuming that you eat meat, and animals have to be slaughtered for your benefit, it is only a question of getting the pituitary gland, as you might say, as any other organ of the ox's body and taking it into your chemical laboratory and testing it and examining it to find out the chemical constituents of it; and then you can do anything you like and prepare anything you please in regard to it. It is absolutely unnecessary to have carried on any experiments whatever upon animals to have arrived at any scientific result. And, furthermore, supposing you had obtained your byproduct from the slaughterhouse and you had taken it to the chemical laboratory and you had there tested it and obtained a knowledge as to the chemical constituents of the pituitary gland and you made your preparation, and supposing you said, "Now, then, we must test this; we will test it on a dog." Supposing you tested it upon a dog; could you be sure that it would have the same results upon a terrier bitch as it would have upon a human female? No, sir.

There was one aphorism stated by Professor Starling before the royal commission, which I want to very strongly and emphatically put before you today, and that is this: The last experiment must always be on man. That is a confession by the leading vivisector in the country, that the last experiment must be upon man. Now, sir, if the last experiment must always be on man, the first scientific experiment must be on man. If the first scientific experiment must be on man, then it stands to logic and common sense that all the previous experiments upon these lower animals must have been at least inconclusive if not misleading. That is an argument I put forward with emphasis to those who would give some attention to the subject; one which should appeal to you as showing the unscientific nature of vivisection, inasmuch as you can not argue from animal to man. For, after you have arrived at your conclusion upon a lower animal, you are still to make sure that that conclusion will be justified in regard to a human subject.

I do not know whether there is any other point you wish, before I proceed, on those two points you brought forward.

Another point is this, as showing the unscientific nature of the practice: Supposing the animal is put under an anesthetic; in doing that, you at once reduce

the animal to an abnormal state. The very application of the anesthetic brings about a more or less abnormal condition, and it is quite impossible to secure a normal result from an abnormal state.

Supposing an animal be not under an anesthetic, then again the fright, the fear, and the pain, and so on, that the animal endures would be such that again the animal would be in an abnormal state

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Again, suppose you take that valuable drug, morphine, the active principle of opium. Where would we be without it? Where would the vivisector be without it? In the case of every dog that is put under an anesthetic, they give the dog an injection of morphia. Morphia does nothing more than to destroy the power of resistance. It does not relieve pain. But how are you going to judge of the amount of morphia that will be necessary? You seem to have made the statement that dogs, in anatomy and physiology, are generally allied to man; that you can reason from a dog to a human being. Do you know, sir, that one grain of morphia would be enough to send almost anyone in this room into the next world; and yet you can give 38 grains of morphia to a dog and the dog will be none the worse for it?

Senator ASHURST. I know, Doctor, that is true. I can smoke one cigar a day. It is painful for me to do that. I have a friend who can smoke 30 cigars a day. Of course, there are physiological idiosyncrasies in all animal life.

Dr. HADWEN. I thank you most cordially for that argument. It will be quite an important argument to go before the Senate, ultimately, because on your own argument it is shown that you cannot even reason from one human being to another, let alone from a dog to a human being. Now, with regard to the dog, a witness told the Royal Commission on Vivisection that he had never been able, except in one instance, to kill a dog with morphia. If you were to reason from a dog to a human being, where would you be?

Take, for instance, belladonna, a most fatal drug in the case of a human being; yet rabbits can eat it until further orders and grow fat on it.

Take hemlock. They give hemlock to a goat, and a goat can flourish on it.

Senator SHORTRIDGE. A goat can flourish on anything.

Dr. HADWEN. That is quite true. My argument is simply that you cannot reason from one to the other.

Senator ASHURST. All of us who will think and investigate know that in all animal life and in plant life there is what I term, for the lack of a better name, physiological idiosyncrasy, and when you say the goat can eat hemlock and the cat cannot eat lemon juice, I admit it.

Dr. HADWEN. Then you have admitted the whole question.

Senator ASHURST. It proves only what we all know, that physiological idiosyncrasies exist in animals as well as mankind.

Dr. HADWEN. Then that ends the whole thing.

In the hearing held on March 4, 5, and 6, 1926, on S. 2957, Sixty-ninth Congress, Dr. Joseph D. Harrigan, practitioner of medicine, Jamaica, Long Island, N. Y., made a very straightforward statement against vivisection, part of which is reprinted here:

Senator GLASS. Give your name, your address, and your profession, Doctor.

Dr. HARRIGAN. My name is Joseph D. Harrigan and my address is Jamaica, Long Island, N. Y.

Senator GLASS. And your profession?

Dr. HARRIGAN. I am a practitioner of medicine.

Senator GLASS. For how long?

Dr. HARRIGAN. I have been practicing since 1883. I am over 43 years in the active practice of the profession in New York City and its vicinity.

Senator FLETCHER. In what branch of the medical profession?

Dr. HARRIGAN. General practice, although I have devoted considerable part of my time during the last 30 years to special study and practice, not exclusive practice, but special study and practice in influenzal phases of disease and epidemic phases of disease in general.

Senator FLETCHER. Are you what we call an allopath?

Dr. HARRIGAN. I am a practitioner of regular allopathic medicine. I am not a cultist of any of the cults.

Senator GLASS. Are you a member of your local medical association?

Dr. HARRIGAN. I am not a member of any society. I foresaw long ago that I would not be permitted to remain a member very long if I was to run up against some of the ideas that they maintain. I was a member, years ago, of the New York County Medical Society, but I dropped out of it.

Now, Mr. Chairman and gentlemen, during the 43 years in which I have been in the active practice of medicine in New York City and vicinity, I was for 17 years connected with clinical work of the Northeast Dispensary in New York City, both in the capacity of attending physician and attending the various indoor clinics, and also as district visiting physician at the homes of the patients. At this dispensary we had a system of rotation whereby each physician spent 6 months of his time devoting it entirely and exclusively almost to one specialty, the next 6 months to another specialty, and the following 6 months to a third, and so on. I was around the circuit a couple of times, besides having had an extensive experience out on district work as district physician.

My district ran a considerable distance along the east side of New York.

During this long period of time I spent considerable time in consideration of the vivisection question. I did this as a physician and not as a moralist or sentimentalist. I felt, as a physician, that if vivisection were of any value whatsoever in elucidating the problems connected with disease in the human system and the remedying of disease, it should be supported; otherwise, if it appeared of little or no value, it should be condemned.

As a result of very careful study of the question from all angles, I came to the conclusion a great many years ago that vivisection has overstayed its time. It should have disappeared from the face of the earth years ago with the Spanish Inquisition. It has been, and is today, in my opinion, the greatest obstacle to a working out of the problems of disease in the human being and the remedying of disease in the human being that was ever instituted. As a 2,000-year-old relic of the crudest and most barbarous days in medicine, it is out of place in this twentieth century. It is just as much out of place as the Spanish Inquisition, the slave trade, or the witchcraft trials of Salem.

Devoting our time to exclusively specializing in the study of human anatomy, human physiology, and restricting our medical studies along these lines to human beings and devoting our time exclusively to the study of those phases of disease which pertain solely and exclusively to human beings in the only safe and scientific way of making any progress whatsoever in solving the problems of disease in the human being or in furnishing remedial measures for the curing of those phases of disease. Drifting into experimental work among the lower animals is a mistake. Investigations by means of experimental work of a vivisectional nature, carried on on all the heterogeneous mass of animal creation, guinea pigs, dogs, cats, monkeys, mice, and rats, is one of the wildest and most preposterous methods of research that any medical specialist of the human family could ever be engaged in performing. It tends to spoil entirely the technique of the medical artist to the human family as a medical specialist to the human family. It blurs his medical artistry. Specializing exclusively in the study of human beings in health and disease is the safest, sanest, and most scientific way that is possible for highest importance, in order to attain special skill, the greatest skill and greatest technique in treatment of certain phases of disease in the human being, to still further specialize, and casting aside general practice among all the heterogeneous phases of disease that afflict humanity, limit our specialization, limit our practice to certain lines of surgical study and medical study and work. That is why we have our neurological institutes; our skin and cancer hospitals and specialists; our eye, ear, and throat specialists; our dentists; our specialists in abdominal surgery, and the like.

When we realize that the neurochemical machine—that each human chemical machine on the face of the globe differs from every other neurochemical machine on the face of the globe in more or less marked degree in certain characteristics, and that each one, when afflicted with some of the physical and chemical and neurochemical disturbances that the ancients called disease, a name handed down to the present time, even when we realize all this—how absurd indeed is it to wander afield among all the lower animal creation, among sets of neurochemical machines differing as widely from the human neurochemical machine as a hydroplane differs from a ferry boat.

Take the dog for an example of the enormous differences, the striking differences between the lower animals and the human being. The dog differs from man in four essential particulars. He differs, first, physically; second, anatomically; third, physiologically; and, fourth, chemically. The last is of as great

and as high importance as any of the others. We know by inspection that the dog differs physically from the human being. Everybody knows that by looking at the dog.

By observation of known facts in the life history of the dog and by deductive reasoning from those facts, we readily work out the fact that physiologically the dog is entirely different from a human being. We can take as an example the physiological function of the dog's stomach as compared with the stomach of man. The dog's stomach will digest bones. It is absolutely impossible for the human stomach to do the same thing. Consequently, by a little reasoning we can reason out the fact that the other organs and parts of the dog must certainly differ widely from the human being physiologically and anatomically. We thereby discover that there is a vast difference between the anatomical structure of the dog and the anatomical structure of man.

Now, then, the last difference, which is the chemical difference. If there was not any chemical difference between the dog and the human being, man and dog would have exactly the same phases of disease. Dogs would have measles, scarlet fever, chicken pox, whooping cough, and the like, just the same as human beings. Who ever heard of a dog with measles, chicken pox, or small pox? It is absolutely impossible for a dog to have the same phases of disease as a human being on account of the chemical difference between the dog and the human being on account of the fact that disease is a matter of physics and chemistry, bacteriologists to the contrary notwithstanding. The bacteriologists, according to one of their greatest spokesmen on the other side of the water, say that disease is a germ and the germ is disease. According to Gould's Standard Medical Dictionary, disease is a pathologic condition of any part or organ of the body or of the mind.

If we go to "pathologic" we find "pertaining to pathology," and if we turn to "pathology," we find "the science of disease." So they are wandering around in a vicious circle, and they do not seem to realize the fact that it would seem proper and pertinent for them first to define disease in order to understand what they are talking about.

On account of the vast differences existing between the dog and the human being, it is an impossibility, as I have said, for them to have the same phases of disease.

The technique of the bacteriologist is interfered with on account of dabbling among the lower animals in their surgical work and so forth. On account of the enormous difference existing between the dog and the human being in the four essential particulars I have just enumerated, it is the height of folly, a waste of time, energy, and resources, to say nothing of the gross injustice to the dog and inhumanity to him, to attempt by vivisectional experimentation to work out any of the problems connected with disease in the human being. You need not take my word for that. We have confessions of the bacteriologists themselves to that effect. Take, for instance, the naive confession of Sir Frederick Treves, house physician to the royal family of England. He stated in one of his lectures in England, as follows:

"Many years ago I carried out on the Continent sundry operations upon the intestines of dogs, but such are the differences between the human and canine bowels, that when I came to operate upon them I found that I was much hampered by my new experience and that I had everything to unlearn, and that my experiments had done little but unfit me to deal with the human intestines."

What this celebrated vivisector confessed to regarding the enormous differences existing between the intestines of dogs and those of man holds good for every other organ and part of the body of the dog as compared with the same parts in man. Naturally we can reason that out for ourselves.

Now, without even digging down in the entrails of the canine anatomy, the very surface and external characteristics of the dog should teach us this, without a particle of doubt about it. Sir Frederick Treves was a specialist in abdominal surgery. Suppose he were, instead a dermatologist, specializing in phases of disease of the human skin, attempting to discover a remedy for those phases of disease. How long would it have taken him to make up his mind that it would not be worth while to spend his time in vivisectional experimentation upon the hide of a dog in order to solve some of the problems in the phases of skin disease in human beings and in furnishing a remedy for skin diseases in human beings. He would not have spent 5 seconds of his time on the matter. On the very face of it, it would be monstrously absurd.

And so it would be with the orthopedic surgeon handling such cases as clubbed feet. Did you ever hear of a dog suffering from clubbed feet? What would you think of an orthopedic surgeon devoting his time to vivisectional experimentation with the idea of producing clubbed feet in the dog? We would consider him insane, would we not, if he were to do that? And yet that is exactly what is going on in vivisectional laboratories today. They are attempting to produce artificially the various phases of disease in lower animals, phases of disease with which they are never afflicted naturally and never can be afflicted naturally.

Now, needless to say, all the attempts to produce these different phases of disease in the lower animals, phases of disease that pertain exclusively to human beings, are complete failures for the simple reason that the dog differs chemically, differs in the four essential particulars of which I have just made mention. For that reason it is an impossibility for them to be produced in the same way. All the time that these phases of disease are being produced these experimental absurdities being carried on in vivisectional laboratories, medical progress is being retarded, and not alone being retarded but being twisted entirely out of its normal course, and not being twisted out of its normal course only but the practice of medicine founded upon the results of all this misleading vivisectional work is made a danger and a menace to the human race. Just as Sir Frederick Treves found his surgical practice made dangerous to the patient, his surgery twisted, and his practice among his patients made dangerous to them by his misleading experiments on the intestines of the dog, so it is with the vivisectionists. They are entirely misled by their vivisectional work not alone in surgery but in medical matters as well. The false conclusions necessarily derived from all of these results must be inevitably absolutely dangerous to humanity.

Of course, this condition of affairs cannot endure forever. The errors and false science that have almost inundated the medical profession in recent years, thanks to the wild wanderings of the bacteriologists among the lower animals, among the cats, dogs, mice, and guinea pigs, and all the others, they are all bearing fruit. From all over the country there are coming hundreds of protests from the clinical physicians, those of them in whom a certain modicum of sanity still remains, and a very deep note of rebellion is being sent out against the laboratories and the laboratory experimenters not alone among the clinical physicians but among the bacteriologists themselves. They are commencing to realize the errors of their ways. They have been forced rather to realize, some of them, the errors of their ways and are really commencing to see the truth.

* * * That is one thing, Mr. Chairman, that the bacteriologists and the general medical profession in general leave out of all calculations—the natural decline in all phases of epidemic diseases, without exception. There is a natural decline. The phases of epidemic disease have a course of procedure very much like the stocks of Wall Street. You take a chart of the stocks of Wall Street and you will see the ups and downs in the various stocks, with this one exception, that while there is a bull movement in certain phases of disease in one country, there is a bear movement in that same phase of disease in another country. And so it is going on all over the world, the up-and-down movement in the types and phases of disease, due to the peculiar environments and various other material conditions, and that one thing is never taken into account by the bacteriologists and other proponents of these various serums and vaccines which they claim stamp out disease, and that is nature, the natural drop in these phases of disease. We eventually drop them out. Such was the condition of affairs with the black plague of the Middle Ages. None of us would be here if there had not been a natural decline in that terrific onslaught on humanity. * * *

In 1674 there were 2,507 cases of mortality from smallpox in London. In 1675 it had dropped to 997, less by far than one-half; about one-third.

The next year it dropped to 359 cases. In 1689, there were 1,389 cases, but the next year it dropped to 778. In 1694 there were 1,683 cases and the next year 784 and the following year only 196.

That is one mistake that the gentlemen of the medical professional make. They never take into consideration this natural decline in all the different phases of disease, and they take full credit for any wiping out or supposed wiping out of any of these phases of disease wherever they have been in existence.

Now, as to the necessity of the vivisectionists working among all the lower animals, among all the different classes of neurochemical machines that they must encounter, it is simply the height of folly, a waste of time, money, and resources to say nothing of gross inhumanity to mankind and an injustice to him to spend all this time and work.

Let us also reprint from the same hearing a part of the statement of Dr. John Bell Fraser, physician and surgeon, 414 Sherbourne Street, Toronto, Ontario:

Dr. FRASER. My name is John Bell Fraser. I am a physician and surgeon; my address is 414 Sherbourne Street, Toronto, Ontario.

Senator FLETCHER. You might state your experience as a physician and surgeon, Doctor.

Dr. FRASER. I have been in general practice since the year 1888. For a number of years, between 15 and 20 years, I have been carrying on independent research, and I have paid especial attention to diseases of the kidneys, in the way of Bright's disease, and also diabetes mellitus.

Although not belonging to the United States, still we have the same class of diseases in Ontario. In discussing this question of whether animal experimentation is advantageous or not, I have taken up that question for a good many years and tried to convince myself one way or the other, whether the experiments on animals have been of benefit to the public—not to the profession, but of benefit to the public—or not.

In discussing it, instead of taking up the question of cruelty, we will take up first a number of diseases and see the effect of experiments on animals, the results of these experiments in the study of the diseases.

Taking up first the question of digestion, Dr. Harrigan has mentioned that in the case of the dog it is altogether different from what it would be in the human being. If you go back a good many years ago, after a large number of experiments on animals of different kinds, various theories were developed as to the value of the digestive juices or the ordinary solutions that you find in the stomach. Although they may be analyzed, and one can give an analysis of the gastric juices without any trouble, yet there is no analysis that will show the effect that you find in the gastric juices. On that question the experiments were not worth very much.

Fortunately for the public, a number of years ago a man named Alexis St. Martin, a French Canadian, met with an accident in which the anterior portion of the stomach and the wall of the abdomen were carried away. A doctor named Beaumont, a clever fellow, a man who paid a great deal of attention to his own calling, studied that case, and it was a possibility for him to examine the effect of the gastric juices that were secreted by the man on the food that went into the stomach. You cannot do that with the dog. You cannot draw your conclusions from that, but on account of having this opportunity of examining the process of digestion going on in the stomach of the man the theories that were advanced years before were thrown aside as practically useless. The theories that were advanced as a result of experiments on animals were found to be practically useless, and a study of the gastric juices in the stomach of the man himself threw some light on the process of digestion, more light than any experiment that had ever been carried on before, so that the experiments on animals were practically a failure, whereas, taking advantage of the condition of St. Martin threw a vast flood of light on the process of digestion in man.

We will take up another question. Take the question of diabetes. That question has been discussed throughout the whole world, and the question has arisen. Has insulin had a beneficial effect on the world, or on the public? Has it had a beneficial effect, or has it not had a beneficial effect? We are saying nothing whatever about cruelty in connection with that. Speaking as a medical man, I consider that there was a great deal of unnecessary cruelty there, but putting that aside, what do we find?

According to later theories and according to practice, insulin is both unsafe and unscientific. It is unsafe on account of the very serious condition that has followed the injection of insulin in children. It is unscientific from the point of view that they have not given any consideration whatever to the different types of sugar found with diabetes. If you take the ordinary case of diabetes, there are two types of sugar, one type dextrose and the other type levulose. To distinguish those sugars you have to use a polariscope. By the use of a polariscope and a monochromatic light, dextrose will show a rotation of a ray of light to the right, and that rotation depends upon the percentage of sugar of dextrose that is found in it. If it is levulose, it will rotate that ray of light to the left, and that rotation will show the percentage of sugar.

The question arises, Has that question been discussed or has it been taken up in the production of insulin? The answer is, No; it has not. Independent

research has shown that if a man is treating a case of diabetes mellitus, he ought to know the type of sugar as well as the fact that he had sugar. We may have sugar coming from a beet or we may have sugar coming from a maple tree. There are two distinct sources of sugar, and yet in the treatment of diabetes through the use of insulin no attention whatever is paid to that.

Then, again, you take a bit of bread, a piece of potato, or any food of that kind containing a starch; a part of that starch is converted into a form of sugar through the action of the saliva, the ptyalin in the saliva. As the ptyalin in the saliva touches the starch it converts it into a form of sugar. No attention whatever is paid to that in the use of insulin.

What is the result? There are one or two points that I think are well worth considering. If you take the death rate in Toronto, you will find our death rate today is altogether higher with the use of insulin than it was before insulin was used, and that is a point that is well worth considering. In fact, it is a point which should be considered.

In Toronto during the years 1922, 1923, 1924, 1925, we had an average of 74 deaths per year, but going back before insulin was used, during the years 1912, 1913, 1914, and 1915, we had a death rate there yearly of 44. There has been that increase of deaths from 44 to 74 without a corresponding increase in population.

Let us consider another point that is very striking. There is no doubt that the injection of insulin in children is dangerous. We find that quite a number of them have died following the use of insulin. It is rather pitiful to see small children, if a man comes near them, where they have given the injections of insulin with a hypodermic needle, to see the fear of these little children if you go around them with a hypodermic needle. They are afraid you are going to introduce insulin, and there is that fear and dread of that instrument.

Is there any reason it? There is a reason for it. We find in almost all of these cases, or in a large proportion of cases we find, that sores developed after these injections, and these sores are very hard to heal so long as these injections are kept up.

There is another point that is very striking. Before the use of insulin, during the years 1912 to 1915, we had an average of four deaths per year from diabetes in children under the age of 9. But later, when they made the experiments in our children's hospital and in other places on children, we had an increase from 4 to 15 deaths. We had 15 deaths at the end of 3 years, and we had just 4 deaths in 1912, 1913, 1914, and 1915. Here we have an increase of nearly 400 percent. You wonder at it. One cannot wonder at it when he finds the effects of introducing serum in a child. You cannot take your hypodermic needle and inject a foreign matter like serum into a child without running the risk of death, and the number of deaths we have there shows it very clearly and completely, so completely that I do not see how anyone could contradict it. In fact, there is no contradiction. We can give facts, and facts are what are needed.

Take the District of Columbia. In the District of Columbia for the years 1922, 1923, and 1924, you had an average of 478,708 people in the whole District. Take the death rate. Take the deaths for 1922, 1923, 1924, and 1925. There were 312 deaths during that time in the District of Columbia. That meant an average of 78 deaths per year from diabetes here in the District of Columbia. The 78 deaths gave an average of about 17 per 100,000.

Going back to the years 1901, 1902, 1903, 1904, and 1905 here in the same District of Columbia, there were 31 deaths on an average per year. There has been that increase in deaths here in the District of Columbia. There has been that increase in deaths from an average of 31 during the years mentioned in 1901 to 1905 to 78 during the years 1922, 1923, 1924, and 1925.

Why did you have it? Why has there been that increase? Should there be that increase? That increase, I think, is due, to a large extent, to our own physicians. Why? They have depended too much on the use of insulin instead of depending on the chemical theory of diabetes. In Toronto at the present time they have seen the error of their ways in injecting so much of this insulin in children, and they are commencing now to make fewer injections. Perhaps they might go for a week, or even 2 weeks, without a single injection, and they are paying very much more attention to dietetics than they did before, and as a result of paying more attention to dietetics, giving food that can be digested, giving food that contains a minimum amount of starch or sugar-forming foods of any kind, we

find that we are beginning to have a little lower death rate than we had. However, we have too much even at the present time.

On the other question, whether it would be possible to reduce the death rate still further, I think it can be possible to reduce it and it will be reduced. I think that instead of the medical profession following blindly the theory that has been followed, that insulin is a cure for diabetes, later they will depend very much more on dietetics than they have been, and if they do that, we will arrive at a still lower death rate than we have at the present time. Until we do that, until the medical profession realizes that it is a matter of dietetics rather than insulin that will reduce our mortality rate, it will continue, but it will fall off if the dietetic treatment is utilized to a greater extent.

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 Senator FLETCHER. We are off the subject a little. We are dealing with dog vivisection now. We will not go into the insects, but there is a serum for the treatment of pneumonia that is produced by the use of the horse.

Dr. FRASER. Yes.

Senator FLETCHER. And the serum for the treatment of diphtheria is produced in the same way?

Dr. FRASER. Yes.

Senator FLETCHER. By the horse?

Dr. FRASER. Yes.

Senator FLETCHER. And vaccine by the cow?

Dr. FRASER. Yes.

Senator FLETCHER. And insulin by the dog? Is that the only use made of the dog thus far in the cure of human beings?

Dr. FRASER. Oh, no. There have been experiments made on dogs for a great many years.

Senator FLETCHER. Insulin is about the only thing that has been developed that it is claimed will benefit men.

Dr. FRASER. That is perhaps the outstanding one. That is true. These different serums are a product, or at least the outcome, of experiments made on dogs and made on animals.

Senator FLETCHER. Have you an idea that there are any concerns in this country interested in manufacturing serums and promoting their use?

Dr. FRASER. Yes.

Senator FLETCHER. You think there is an interest of that kind?

Dr. FRASER. There is no doubt of that.

Dr. SMITH. That is where the strength lies. It is financially backed.

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 Dr. FRASER. Mr. Chairman, perhaps I have talked too long now. I will not take much longer. There are a lot of facts I can give.

The point came up with reference to smallpox, whether the past procedure had been good or not. That is an open question as to whether vaccination is injurious or whether it is beneficial. A large number of the doctors today say that it is beneficial, while perhaps almost as large a number say that it is not, and I think the majority of the public say that vaccination is not beneficial. I think a large proportion, at least, of the public say it is not. However, no matter whether that is beneficial or not, we will assume for the sake of argument that it is beneficial. Then, that was not brought about by the use of experiments on animals, or by any serums.

Senator GLASS. Doctor, vaccine is not taken from a dog, is it?

Dr. FRASER. No.

Senator GLASS. It occurs to me that we appear to be going very far afield from this bill.

Dr. FRASER. Mr. Chairman, perhaps you are right.

Senator GLASS. We are accumulating here almost a library upon the different views of the different schools of medicine, whereas the committee is charged with the duty of hearing presented the question of vivisection of dogs, as affected by this bill.

Dr. FRASER. Mr. Chairman, would you allow me to explain just a little?

Senator GLASS. Oh, yes.

Dr. FRASER. My reason for bringing up these points is that in each one of them the basis was experiments on animals, and if this basis of experiment on animals was not sound, then the conclusions would not be sound. So, in tracing these

points, I have been bringing out these matters. Perhaps I need not have touched on smallpox at all.

Senator GLASS. But this committee, I submit, cannot undertake to decide scientific questions between various schools of medicine. It seems to me the investigation of hearing here ought to be confined to this bill, as to whether vivisection on dogs, particularly, has made any valuable contribution to science that would warrant a continuation of that practice, or whether it has not, and therefore the committee might determine whether to stop the practice where it has jurisdiction.

Dr. FRASER. With respect to each of the diseases that I mentioned, experiments were carried out on dogs, and as a result of these experiments on dogs there has been a little variation in form of treatment. If this form of treatment that we have at the present time in a number of diseases is not quite as good, or has not given quite as good results as the former methods, then it seems to me we ought not to continue it.

Senator GLASS. That is true.

Dr. FRASER. That is why I have brought up these points. I know I have taken already a longer time than I expected to take. One could go on and talk a great deal longer, but if you take a dozen different diseases, for example, in which there has been an increase of deaths, and we find that this increase of deaths has resulted in a change in the line of treatment, and that change in the line of treatment was due to experiments on dogs, it seems to me that if we have an increased death rate, where the general death rate is decreasing—for example, where your general death rate has decreased from 19 to 14, in round numbers, per thousand per year, and we have an increase in some of the deaths, such as you have here in the District of Columbia, and in each case the varied line of treatment has been due to experiments on dogs, it seems to me we ought not to continue it.

Thank you, gentlemen, for your kindness.

As a final statement, let me call your attention to the hearings held on January 27, 28, and 29, 1938, on H. R. 3890 of the Seventy-fifth Congress, third session, and to the testimony of Dr. William Howard Hay, of Mount Pocono, Pa.:

Mrs. JENCKES. Please state your full name, occupation, and address.

Dr. HAY. My name is William Howard Hay, M. D., no title, no affiliation, private sanitarium.

Mrs. JENCKES. Your address?

Dr. HAY. Mount Pocono, Pa.

Mrs. JENCKES. Thank you, Dr. Hay.

Dr. HAY. I take it, Madame Chairman, it is well understood by this committee as well as by all present that the question of cruelty in the practice of vivisection is settled. We cannot conceive of experiments of the character outlined in the laboratory reports that would not be excessively cruel. The impression that these vivisections are performed under anesthetic has been created to keep the public from realizing the extreme cruelty of the practice, but the very nature of the reports in almost 9 cases out of 10 makes it obvious that an anesthetic should not have been used, as the experiments are usually done to determine reflexes or other animal reactions that could not occur reliably under the influence of an anesthetic. Also many of these experiments cover a period of a number of weeks, during which the animal is under observation and study. Now, it is well known that an anesthetic cannot be used over long periods; it is good only for the initial work of cutting, perhaps, and that is all.

I do not feel like devoting much time to discussing the cruelties of vivisection for the reason that most of the other witnesses will perhaps devote themselves to that side of the question. I merely wish to challenge the utility of the practice.

I do not know today, after 47 years spent in medical practice and, I think, a rather close approach to the scientific side, of any human ailment that has been materially benefited by all of the practices of vivisection from the very beginning. If such a thing occurs, or has occurred, it has entirely escaped my reading. We find very many cases in which a serum has been evolved for the

ostensible treatment of disease, and yet when we study our statistics we find absolutely no change in the mortality rates where this serum has been applied.

Now, an immediate objection will be raised to this in the case of insulin. We did not need to use vivisection to determine the effect of insulin with respect to the human body. That was well understood and discussed long ago by Obie. It remained for Dr. Bankin to devise a means of extracting the insulin from the pancreas of the sheep—preserving it and using it as a reenforcement of our own function. He warned the profession when he introduced insulin that it was not a cure for diabetes. It has not helped the profession a degree, for diabetes statistics have borne out his contention that the percentage of deaths from diabetes is on the increase now, as it has always been. The rate of increase in the death rate from diabetes is proceeding at exactly the same rate of increase since the introduction of insulin as before.

I submit that what is true of the treatment of diabetes is equally true of every other disease that has been treated by a serum—that we have no way of determining whether or not that serum is protective. In fact, when we administer a serum we have destroyed the evidence. We recognize natural immunity. This natural immunity we cannot fathom—we cannot measure—but we do know that a very large percentage of every community is unaffected by an epidemic—a small percentage only of that community falls victim to the epidemic. We recognize the factor that protects 90 percent as what we call natural immunity. Granting that we have a natural immunity in 90 percent, there is no immunity for any one specific infection at any one time. Then suppose we immunize the entire community and we find there is 10 percent without natural immunity; that is exactly what we do find. We have not increased the immunity of the community in the least by the introduction of this so-called protective serum.

From the use of smallpox vaccination right down to the latest development in the prevention of other diseases we have have exactly the same story. We have a gradual decline in the instance of smallpox from the time we first knew what smallpox serum was, and that the smallpox infection has proceeded at practically the same rate ever since, regardless of whether or not the subject has been vaccinated.

If we look at vaccinated countries today for proof, the Philippines are the most thoroughly vaccinated people in the world, at the instance of the United States; Japan, second; Italy, third; Germany, fourth; and in direct ratio to the perfection of the vaccination laws and the enforcement thereof do we have a ratio corresponding of smallpox. In Australia, where they have no smallpox in the Province of Victoria, there was a law for a time on the books compelling vaccination which fell into disuse in a few years, we find no smallpox. But we do find the highest ratio of the smallpox death rate in the Philippines. That is true right through every country that practices vaccination.

The friends of vaccination today say it is protective only for 2 years. I challenge that statement. They have not proved it is protective for even one moment. If it protects for 2 years, then what is protecting the benighted United States which is not more than 5 percent vaccinated today? If we look on vaccination as protective throughout life, the United States is barely over 50 percent vaccinated, but if it is protective for only 2 years, it is less than 5 percent vaccinated.

Why do we not have smallpox? In only 16 of the States is smallpox vaccination compulsory. Only 16 States require it for sending children to school; 32 States do not. Do the 32 States have more smallpox than the 16? Statistics prove they do not. What protects the 32 States that are not enforcing vaccination?

We have the same condition in diphtheria immunization. We cannot prove we have immunized a single individual against diphtheria. We have to determine whether they are susceptible to diphtheria and then we administer a protective serum, and then we say that party is immunized against diphtheria. It is supposed by scientists—and it has been fostered and believed for many years—that not more than 15 percent of the children are subject to diphtheria—that is, if an epidemic breaks out in the school and all are exposed, not more than 15 percent as a rule will come down with diphtheria. The most ardent advocate of vaccination must admit the failure to immunize in at least 15 percent of the cases.

In fact, in Cook County, Ill., when the studies in diphtheria immunization were begun, the management decided to divide the nurses into two groups, and of course, in Cook County the medical force is large. One group was immunized against diphtheria; the other group was not. Diphtheria broke out in the Cook County hospitals within a few weeks of this time, and strangely enough it broke out in the immunized group. When the epidemic had subsided, statistics showed there had been more cases among the immunized nurses than those that had not had immunization. What is true of smallpox and diphtheria is equally true of every other disease for which we administer a serum today. When we have administered that serum we have destroyed the only evidence possible that we have immunized, because we have to take into account natural immunity that protects 90 percent of the population only, and if no one comes down with the prevailing epidemic it is no proof that we have immunized that group; there may have been no susceptibility.

We have built this entire theory of serum immunization on studies made through vivisection, and if through all these torture studies on many millions of dogs we have evolved nothing better than a guess as to whether we can create immunity or not, is it not time we throw over the whole thing into discard?

If all the cruelty practiced in vivisection were justified by results, I would be one that would hesitate to raise my voice against vivisection. But if after all these years we cannot point to one definite result that it has lengthened human life, eased human suffering, or added to human happiness, obviously, then, I think we are not justified in practicing any method as cruel and wasteful as that of vivisection.

Mr. LEMKE. The testimony of these various physicians would indicate that a small percentage of the regularly practicing physicians of the country believe that vivisection is necessary to the advances of the science of medicine. There seems to be a small group of vivisectionists, backed by large drug combines, who are interested in the serum idea of disease prevention and cure, and especially in the profits derived from the sale and use of said serums, who are anxious to maintain the right to practice their gruesome experimentation on dogs, regardless of the cruel treatment which they engender, in order that they can maintain interest and use of this form of medicine.

There seems to be a great deal of information which would indicate that the over-all death rate has not been reduced. Furthermore, neither have the special cures reduced the death rate from these diseases, the presumed cures of which have been the result of these experiments. As a matter of fact, the whole study would indicate that a return to some of our old forms of treatment of these diseases might prove to be of very great benefit to the human race. The practitioners at least would not have to unlearn all they had hoped they would discover by vivisection of dogs, only to find later that it had no application whatever to human beings and their ailments.

Mr. BATES. Will you put in the record, Mr. Lemke, how many States have antivivisection laws?

Mr. LEMKE. Yes. I shall put that into the record also.

Mr. McGEHEE. I understand there are some Members of Congress who want to be heard and I will permit them to file statements.

Mr. LEMKE. The committee asked me to furnish information concerning laws by various States on the subject of vivisection. I asked

for the information from the Library of Congress and I am glad to give their compilation as follows:

State laws relating to vivisection

United States	Specific law prohibiting vivisection	General law preventing cruelty	Specific law permitting vivisection for scientific, etc., purposes	United States	Specific law prohibiting vivisection	General law preventing cruelty	Specific law permitting vivisection for scientific, etc., purposes
Alabama.....	No.....	Yes.....	No. .	Nebraska.....	No.....	Yes.....	Yes.
Arizona.....	No.....	Yes.....	No.	Nevada.....	No.....	Yes.....	Yes.
Arkansas.....	No.....	Yes.....	No.	New Hampshire.....	No.....	Yes.....	No.
California.....	No.....	Yes.....	Yes.	New Jersey.....	No.....	Yes.....	Yes.
Colorado.....	No.....	Yes.....	No.	New Mexico.....	No.....	Yes.....	No.
Connecticut.....	No.....	Yes.....	No.	New York.....	No.....	Yes.....	Yes.
Delaware.....	No.....	Yes.....	No.	North Carolina.....	No.....	Yes.....	No.
Florida.....	No.....	Yes.....	No.	North Dakota.....	No.....	Yes.....	No.
Georgia.....	No.....	Yes.....	No.	Ohio.....	No.....	Yes.....	No.
Idaho.....	No.....	Yes.....	Yes.	Oklahoma.....	Yes ¹	Yes.....	No.
Illinois.....	Yes.....	Yes.....	No.	Oregon.....	No.....	Yes.....	No.
Indiana.....	No.....	Yes.....	No.	Pennsylvania.....	Yes ²	Yes.....	Yes.
Iowa.....	No.....	Yes.....	No.	Rhode Island.....	No.....	Yes.....	No.
Kansas.....	No.....	Yes.....	No.	South Carolina.....	No.....	Yes.....	No.
Kentucky.....	No.....	Yes.....	No.	South Dakota.....	Yes ³	Yes.....	Yes.
Louisiana.....	No.....	Yes.....	No.	Tennessee.....	No.....	Yes.....	No.
Maine.....	Yes.....	Yes.....	No.	Texas.....	No.....	Yes.....	Yes.
Maryland.....	No.....	Yes.....	No.	Utah.....	No.....	Yes.....	No.
Massachusetts.....	Yes.....	Yes.....	No.	Vermont.....	No.....	Yes.....	No.
Michigan.....	No.....	Yes.....	No.	Virginia.....	No.....	Yes.....	No.
Minnesota.....	No.....	Yes.....	No.	Washington.....	Yes.....	Yes.....	Yes.
Mississippi.....	No.....	Yes.....	No.	West Virginia.....	No.....	Yes.....	No.
Missouri.....	No.....	Yes.....	Yes.	Wisconsin.....	No.....	Yes.....	Yes.
Montana.....	No.....	Yes.....	No.	Wyoming.....	No.....	Yes.....	No.

¹ In schools.

² Public schools.

³ In certain schools.

STATE LAWS RELATING TO VIVISECTION

Alabama.—This State has no specific law prohibiting vivisection. The State does have a general law to prevent cruelty to animals, but it has been construed by the courts "to prevent cruelty to animals and does not prevent the mere killing of animals, but prohibits cruelly killing them." A provision in the School Code of 1927 which provided that "* * * experiments on any living creature shall not be permitted in any public or private school" has been repealed by implication since the provision is absent from the code adopted by the legislature and approved July 2, 1940 (School Code of 1927, sec. 598; Code (1940), title 3, sec. 11; title 52, sec. 546; *Abercrombie v. State*, 8 Alabama App. 326, 62 So. 966).

Arizona.—Arizona has no specific law prohibiting vivisection, but it does have a general law prohibiting cruelty to animals (Code Ann. (1939), secs. 43-1202, 43-1203).

Arkansas.—No specific law prohibiting vivisection. The State does have a general law prohibiting cruelty to animals (Dig. Stat. (Pope, 1937, secs. 3297-3313; Supp. (1944), pp. 544-556).

California.—No specific law prohibiting vivisection. There is a general law prohibiting cruelty to animals. The penal code provides that no part of the law relating to cruelty to animals shall be deemed "to interfere with * * * properly conducted scientific experiments or investigations performed under the authority of the faculty of a regularly incorporated medical college or university of this State" (Penal Code (Deering 1941) sec. 594-599f; laws 1943 chs. 913, 1023).

Colorado.—No specific law prohibiting vivisection. The State does have a general law prohibiting cruelty to animals (Stat. Ann. (Michie, 1935) ch. 48, secs. 390, 404-425).

Connecticut.—No specific law prohibiting vivisection. There is a general law prohibiting cruelty to animals (Gen. Stat. (1930), sec. 6249-6257; Supp. 1935, sec. 1701c; Supp. 1939, sec. 406d; Supp. 1941, secs. 865f, 866f; laws 1945, ch. 231).

Delaware.—No specific law prohibiting vivisection. The State has a general law for the prevention of cruelty to animals (Rev. Code (1935) sec. 2556-2574).

Florida.—No specific law prohibiting vivisection. There is a general law prohibiting cruelty to animals. Members of the instructional staff of the public schools are required to instruct students in kindness to animals (Stat. (1941) secs. 231.09 (1), 828.01-828.18).

Georgia.—No specific law prohibiting vivisection. There is a general law prohibiting cruelty to animals (Code (1933) secs. 26-3402, 26-7901-26-7904).

Idaho.—No specific law prohibiting vivisection. The State does have a general law prohibiting cruelty to animals. Provisions of the law prohibiting cruelty, however, provide "nor must this chapter be construed as interfering with the right to destroy any venomous reptile, or animal known as dangerous to life, limb, or property, or to interfere with the right to kill all animals used for food or with properly conducted scientific experiments or investigations performed under the authority of the faculty of a regularly incorporated medical college, or university of this State" (Code Ann. (1932) sec. 17-4201-17-4216).

Illinois.—This State has a law specifically prohibiting vivisection in connection with studies in public schools, viz: "No experiment upon any living creature for the purpose of demonstration in any study shall be made in any public school of this State. No animal provided by, nor killed in the presence of, any pupil of a public school shall be used for dissection in such school, and in no case shall dogs or cats be killed for such purposes. * * *." This State has a general law prohibiting cruelty to animals and the corporate authorities of municipalities have power to prohibit cruelty to animals (Rev. Stat. (1943) ch. 24, sec. 23-86, ch. 38, secs. 144-146, 437, ch. 122, sec. 526-528).

Indiana.—No specific law prohibiting vivisection. There is a general law prohibiting cruelty to animals. The common council of every city has power to enact ordinances to prevent cruelty to animals (Stat. Ann. (Burns, 1933; Supp. 1940) secs. 10-201-10-210, 48-1407 (47)).

Iowa.—No specific law prohibiting vivisection. There is a general law prohibiting cruelty to animals (Code (Reichmann, 1939) sec. 13132-13133).

Kansas.—No specific law prohibiting vivisection. The State does have a general law prohibiting cruelty to animals (Gen. Stat. Ann. (Corrick, 1935), secs. 21-1201-21-1203).

Kentucky.—No specific law prohibiting vivisection. There is a general law prohibiting cruelty to animals (Rev. Stat. (Baldwin, 1942), secs. 433.810-433.830, 436.180).

Louisiana.—No specific law prohibiting vivisection. There is a general law prohibiting cruelty to animals (Gen. Stat. Ann. (Dart, 1939), secs. 331-348; Criminal Code (1942) art. 102).

Maine.—This State has a specific law prohibiting vivisection in schools supported wholly or in part by public money, viz: "No person in any of the schools of the State supported wholly or in part by public money shall practice vivisection or perform any experiment upon a living animal or exhibit to any pupil in such school an animal which has been vivisected or experimented upon. Whoever willfully violates any of the provisions of this section shall be punished by a fine of not less than \$10 nor more than \$25." There is a general law prohibiting cruelty to animals wherein it is provided that motion-picture films shall not involve in preparation deliberate cruelty to animals (Rev. Stat. (1944), ch. 127, secs. 1-27).

Maryland.—No specific law prohibiting vivisection, but there is a general law prohibiting cruelty to animals (Code Ann. (Flack, 1939), art. 27, secs. 70-80).

Massachusetts.—This State has a law prohibiting vivisection in public schools, viz: "No person shall, in the presence of a pupil in any public school, practice vivisection or exhibit a vivisected animal. Dissection of dead animals or any portions thereof in such schools shall be confined to the classroom and to the presence of pupils engaged in the study to be promoted thereby and shall in no case be for the purpose of exhibition. Violation of this section shall be punished by a fine of not less than \$10 nor more than \$50." There is also a general law for the prevention of cruelty to animals (Gen. Laws (1932), ch. 71, sec. 33, ch. 129, sec. 9, ch. 272, secs. 77-95; Laws 1934, chs. 23, 234; Laws 1943, ch. 332, sec. 10).

Michigan.—Although this State has no specific law prohibiting vivisection, it has made it unlawful to perform various specified operations without anesthesia,

viz: "It shall be unlawful for any person in this State to perform the following-named surgical operations upon animals without first administering either local or general anesthesia: The emasculation of hermaphrodites, the emasculation of mares and female dogs, the operation of fistulous wethers and poll evil, lithotomy, and all forms of neurectomy, the Caesarean operation, the operation for umbilical and scrotal hernia, and the operation for wind-broken horses called laryngio crycorectomy." The State has a general law prohibiting cruelty to animals (Comp. Laws (1929, Mason, Supp. 1940), secs. 5209, 17066-17086).

Minnesota.—This State has no specific law prohibiting vivisection though it does have a general law to prevent cruelty to animals (Stat. (1941), secs. 343.01-343.12, 614.41-614.50).

Mississippi.—No specific law prohibiting vivisection. The State does have a general law to prevent cruelty to animals (Code Ann. (1942), secs. 2067-2075).

Missouri.—No specific law prohibiting vivisection. There is a general law to prevent cruelty to animals which would seem to permit vivisection for scientific purposes, viz: "Every person who shall willfully and maliciously or cruelly kill, maim, wound, beat, or torture any dumb animal, whether belonging to himself or another, shall upon conviction be punished by imprisonment in the county jail for not more than 3 months, or by a fine of \$50 or by both such fine and imprisonment: *Provided*, That nothing herein contained shall be construed to prohibit or interfere with any scientific experiments or investigations: *Provided further*, That nothing in this section shall apply to the hunting or trapping of wild animals." Cities of the first class and of the second class are given power to prevent cruelty to animals (Rev. Stat. (1939), secs. 4557-4558, 6293, 6309).

Montana.—This State has no specific law prohibiting vivisection though it does have a general law to prevent cruelty to animals. City and town councils are authorized to prohibit cruelty to animals and may punish such offenders (Rev. Codes Ann. (Anderson and McFarland, 1935), secs. 5039.31, 11508-11515.1).

Nebraska.—Nothing [in the law prohibiting cruelty to animals] shall be construed to prevent the bureau of animal husbandry or educational or scientific institutions from using domestic and other animals for experimental or scientific purposes or for the manufacturing of serum or virus (Rev. Stat. (1943), secs. 28-553).

The following cities have been empowered to provide for the prevention of cruelty to animals: Cities of the metropolitan class, first-class cities, and second-class cities (Rev. Stat. (1943), secs. 14-102, 16-210, 17-138).

Nevada.—No part of this act [prevention of cruelty to animals] shall be deemed to interfere with any scientific or physiological experiments conducted or prosecuted for the advancement of science or medicine.

Nothing herein contained [prohibition of mutilating or maiming an animal] shall be construed to prohibit or interfere with any properly conducted scientific experiments or investigations, which experiments shall be performed only under the authority of the faculty of some regularly incorporated medical college of this State (Comp. Laws (Hillyer, 1929), secs. 3239, 10574).

New Hampshire.—Penalizes the mutilation of animals (Rev. Laws (1942) ch. 445, sec. 1).

New Jersey.—Nothing in the law for prevention of cruelty to animals shall be construed to prohibit or interfere with properly conducted scientific experiments performed under the authority of the State health department. That department may authorize the conduct of such experiments by schools maintained by the State or by Federal Government, agricultural stations, or by medical societies, universities, and philanthropic institutions authorized to do business in the State and having among their corporate purposes investigations into the causes, nature, and prevention of diseases of men and animals; and may for cause revoke such authority (Rev. Stat. (1937), sec. 4:22-16a).

New Mexico.—There is a general law on cruelty to animals; and cities and towns are also empowered to prohibit and punish cruelty to animals (Stat. Ann. (1941), secs. 14-1828, 41-401-41-403).

New York.—Nothing contained herein [provision penalizing the maiming and mutilation of animals] shall be construed to prohibit or interfere with any properly conducted scientific experiments or investigations, which experiments shall be performed only under the authority of the faculty of some regularly incorporated medical college or university of this State (Penal Law, sec. 185 (Thompson, 1939)).

North Carolina.—Penalizes anyone who wilfully and needlessly mutilates any animals. The words "torture and cruelty" shall be held to include every act, omission, or neglect whereby unjustifiable physical suffering or death is caused (Gen. Stats. (1943), secs. 14-360).

North Dakota.—There is a general law prohibiting cruelty to animals. Municipalities are also empowered to prohibit and punish cruelty to animals (Rev. Code (1943), secs. 36-2102-36-2113, 40-0501 (42)).

Ohio.—There is a general law prohibiting cruelty to animals (Code Ann. (Throckmorton, 1940), secs. 13361-13378).

Oklahoma.—No experiments on any living creature shall be permitted in any public school. This provision shall be enforced by the State superintendent of public instruction, the county superintendents of public instruction, and the principals of each public school. No teacher in the public schools shall be entitled to receive any portion of the public-school moneys as compensation for services, unless such teachers shall have complied with this provision (Stat. (1941), title 70, secs. 500-502).

There is also a general law prohibiting cruelty to animals (Stat. (1941), title 21, secs. 1681-1690).

Oregon.—Penalizes mutilation and cruelty to animals (Comp. Laws Ann. (1940), sec. 23-1312).

Pennsylvania.—Penalizes cruelty, maiming, and killing of animals; but prohibits in this connection the issuance of warrants which would authorize any officer to enter upon or search the premises where scientific research work is being conducted under the supervision of graduates of reputable scientific schools, or where biological products are being produced (Stat. (Purdon, 1936), title 18, secs. 3101-3102, 3121).

No cruel experiment on any living creature shall be permitted in any public school (Stat. (Purdon, 1936), title 24, sec. 1554).

Unclaimed dogs in the custody of police officers shall not be sold for the purpose of vivisection (Stat. (Purdon, 1936), title 3, sec. 479; title 53, sec. 2730).

Rhode Island.—Penalizes mutilation and unnecessary cruelty (Gen. Laws Ann. (1938), ch. 640, sec 1).

South Carolina.—Penalizes needless mutilation and the infliction of unnecessary pain and suffering upon animals (Code (1942), sec. 1594).

South Dakota.—No experiment upon live animals, to demonstrate facts in physiology, shall be permitted in any school.

No part of this chapter [prevention of cruelty to animals] shall be construed so as to interfere with any properly conducted scientific experiments or investigations which shall be performed only under the authority of the faculty of some regularly incorporated medical college, the University of South Dakota, or any physician and surgeon, duly licensed under the laws of this State (Code (1939), secs. 15.3109, 40,2211).

Tennessee.—Penalizes the needless mutilation or killing of animals (Code (Michie, 1938), secs. 5091, 5097, 5104).

Texas.—No specific law prohibiting vivisection. The State has a general law for prevention of cruelty to animals. The following provision would seem to permit vivisection for scientific purposes: "* * * The board [Anatomical Board of the State of Texas] shall also have power to authorize incorporated schools or colleges, and individual physicians and surgeons to experiment on the lower animals under bond as hereinafter designated" (Stat. (Vernon, 1936), art. 180-189, 4587).

Utah.—No specific law prohibiting vivisection. The State has a general law for prevention of cruelty to animals (Code Ann. (1943), secs. 103-5-1-103-5-16).

Vermont.—No specific law prohibiting vivisection. The State has a general law for prevention of cruelty to animals (Pub. Laws (1933), secs. 8498-8515).

Virginia.—No specific law prohibiting vivisection. The State has a general law for prevention of cruelty to animals (Code Ann. (Michie, 1942), secs. 4554-4567).

Washington.—This State has a law prohibiting vivisection in schools: "No teacher or other person employed in any school of the State of Washington, except medical or dental school or medical or dental department of any school, shall practice vivisection upon any vertebrate animal in the presence of any pupil in said school, or any child or minor there present; nor in such presence shall exhibit any vertebrate animal upon which vivisection has been practiced." The State also has a general law for prevention of cruelty to animals, a provision of which would seem to permit vivisection for scientific purposes: "No part of this act shall be deemed to interfere with * * * any properly conducted scientific

experiments or investigations, which experiments or investigations shall be performed only under the authority of the faculty of some regularly incorporated college or university of the State of Washington" (Code Ann. (Pierce, 1939), secs. 1957-1974, 5206).

West Virginia.—No specific law prohibiting vivisection. The State has a general law for prevention of cruelty to animals (Code Ann. (Michie, 1943), secs. 6074-6078).

Wisconsin.—No specific law prohibiting vivisection. The State has a general law for the prevention of cruelty to animals and provides that said law shall not forbid experiments carried on for scientific research (Stat. (1943), secs. 343.47-343.474).

Wyoming.—This State has no specific law prohibiting vivisection but does have a general law to prevent cruelty to animals (Rev. Stat. Ann. (Courtright, 1931), secs. 6-101-6-115, 103-601).

STATEMENT OF HON. HOWARD E. CAMPBELL, PENNSYLVANIA, ON H. R. 5572,
ANTIVIVISECTION BILL

Mr. Chairman, I am appearing before your committee in support of H. R. 5572, introduced by Congressman Lemke, as I can find no real reason for the vivisection of dogs in surgical experimental work. If those conducting such experiments feel that animals must be used, those animals that are not domesticated and have not been taught to trust their masters are the type that should be used. The dog certainly has a right to expect as much loyalty from man as he has given evidence in many cases of risking his own life for the preservation of his master—to say nothing of the great part he contributed in the war effort. As a matter of fact, most of the improvements in medical and surgical work that are really beneficial have resulted from treatment and operation on human beings in cases where emergency demanded immediate action. I have in mind, particularly, severe wounds to the heart itself where the operation has turned out successful.

STATEMENT OF CONGRESSMAN JOHN PHILLIPS, OF CALIFORNIA, BEFORE THE SUBCOM-
MITTEE OF THE JUDICIARY COMMITTEE, IN SUPPORT OF H. R. 5572

My name is John Phillips, and I represent the Twenty-second District of California in the Congress. I am indebted to this subcommittee for the privilege of extending my remarks in support of H. R. 5572. I particularly thank the chairman for allowing me to insert these remarks in the record after the public hearings were ended. I was unable to attend those hearings. We were hearing a very important bill before the House Committee on Agriculture at the time.

I am definitely in favor of H. R. 5572. If the arguments are weighed carefully by this committee, I think the bill will be reported to the floor. I do not look on myself as "emotional," and the fact that I am by profession a business analyst should suggest that I am trained to hear and weigh both sides of an argument. There will be some misrepresentation regarding this bill, but it will not come from those who support it. I speak from a knowledge of the subject, extending over 30 years.

I desire to emphasize two features of the argument. First, the bill applies only to dogs. There will be people who wish to extend this protection to all animals. That discussion is not before the committee in this bill.

The relationship between the dog and man is entirely different from the relationship between man and any other animal. I mean exactly that.

This relationship has been recognized by every scientist, from Darwin down, or up. It is recorded by scientists and historians. One scientist has gone so far as to say that if the dog's palate had been shaped differently, his development would have paralleled the development of man. There is no question but that his development has gone beyond the other animals with which man is in constant association.

This relationship is so definite that the dog does not look on man as a separate animal, if you understand me. To try and put it in the dog's language, he looks on man as the head of the pack.

Therefore, when we use the dog for purposes of vivisection, we use an animal exceptionally close to man himself. The doctor who comes before your committee and defends the use of the dog in vivisection is, in effect, defending the

use of the animal closest to man, and the animal which has the greatest trust in man. The only closer relationship would be the human child, before it was old enough to understand and defend itself. The child, at that stage, depends on the same trust.

I state a simple, scientific fact. The use of the dog for experimental purposes by man is as indefensible as the use of a child would be. I hope your committee will consider that seriously.

The second argument I want to emphasize should really have some supporting data, and I admit at the start that I do not have the time to search them out for this purpose. I can, however, accredit myself as a witness before the committee. I graduated from college as a "pre-med" student and held a teaching fellowship the year before I expected to enter medical course. My interests in those days were entirely scientific and not at all political. It was a disappointment when financial problems broke into my plans.

I had taken my preliminary bacteriological work, quite a bit of dissection, and other medical subjects. I took my bacteriology under Dr. Alexander Abbott and Dr. David Bergey, and I challenge any opponent of this bill to say that these were not top-flight men in medical education.

I say to you, therefore, on the basis of this knowledge, that of all the discoveries and benefits credited to the use of dogs in vivisection, a very high percentage would have resulted from experimental work without the use of any animals at all.

My plea today is for a favorable report on the bill so that it may come to the whole House for consideration.

(Whereupon, the committee adjourned.)

